

S01_01 (S041010): Life Science / Knowing Type: MC Key: A
Label: The function of seeds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	75.0	75.0	9.5	6.4	8.5	0.6	0.0	77.5	72.8
	2015	875	80.3	80.3	7.2	5.1	6.1	1.1	0.1	81.0	79.6
Bahrain	2011	588	68.4	68.4	9.4	10.1	11.0	0.6	0.5	67.3	69.6
	2015	598	63.2	63.2	14.6	12.2	9.0	0.6	0.3	62.6	63.9
Belgium (Flemish)	2011	692	84.9	84.9	4.8	3.9	4.7	1.6	0.1	84.8	85.1
	2015	766	83.9	83.9	6.5	3.4	4.4	1.3	0.5	83.5	84.4
Chile	2011	798	81.6	81.6	3.5	7.7	5.6	0.8	0.7	81.7	81.5
	2015	673	87.8	87.8	4.4	3.6	2.0	0.9	1.2	85.6	89.7
Chinese Taipei	2011	615	91.5	91.5	3.3	2.1	2.9	0.0	0.2	90.4	92.6
	2015	613	91.5	91.5	3.0	2.0	2.8	0.7	0.0	90.8	92.2
Croatia	2011	659	87.5	87.5	5.1	2.5	4.2	0.6	0.1	88.4	86.7
	2015	571	85.9	85.9	7.8	2.4	2.9	0.8	0.2	87.9	84.3
Czech Republic	2011	660	94.1	94.1	2.3	0.6	2.3	0.7	0.0	91.6	96.5
	2015	750	92.5	92.5	2.2	2.3	2.1	1.0	0.0	92.3	92.7
Denmark	2011	566	80.2	80.2	5.2	6.2	4.8	3.4	0.1	80.8	79.7
	2015	526	80.5	80.5	4.6	8.2	4.4	1.4	0.9	80.4	80.6
England	2011	486	81.5	81.5	5.1	5.0	7.5	0.7	0.3	80.6	82.4
	2015	569	81.9	81.9	6.4	5.1	6.1	0.5	0.0	82.8	80.9
Finland	2011	650	95.0	95.0	2.0	0.3	1.8	0.8	0.1	94.7	95.3
	2015	716	93.8	93.8	1.8	1.3	1.5	1.1	0.4	96.2	91.5
Georgia	2011	689	79.0	79.0	6.8	7.3	5.0	1.0	0.9	87.3	71.7
	2015	554	71.1	71.1	8.2	9.2	7.5	1.5	2.4	74.1	68.5
Germany	2011	581	93.1	93.1	2.1	3.1	0.8	1.0	0.0	92.8	93.5
	2015	556	88.0	88.0	4.0	3.2	3.2	1.3	0.3	89.7	86.2
Hong Kong SAR	2011	567	87.0	87.0	5.4	2.4	4.1	1.1	0.0	86.7	87.4
	2015	517	87.4	87.4	5.8	2.8	3.8	0.2	0.0	86.6	88.1
Hungary	2011	741	91.3	91.3	3.6	1.5	2.6	0.6	0.4	90.2	92.4
	2015	715	86.7	86.7	5.9	2.4	2.0	2.7	0.4	84.7	88.8
Iran, Islamic Rep. of	2011	814	59.0	59.0	19.1	13.4	5.9	1.8	0.7	57.4	60.6
	2015	543	66.5	66.5	13.9	11.0	5.4	1.5	1.6	66.7	66.4
Ireland	2011	645	76.3	76.3	8.9	4.9	9.6	0.3	0.1	78.2	74.2
	2015	623	81.4	81.4	6.8	4.4	6.5	0.8	0.1	84.9	78.0
Italy	2011	600	93.5	93.5	2.0	2.1	2.4	0.0	0.0	93.5	93.5
	2015	624	90.6	90.6	2.1	1.4	2.7	3.1	0.0	90.6	90.6
Japan	2011	629	78.8	78.8	10.8	7.2	2.2	1.0	0.0	77.1	80.4
	2015	621	82.5	82.5	9.7	4.8	2.5	0.6	0.0	81.7	83.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_01 (S041010): Life Science / Knowing Type: MC Key: A
Label: The function of seeds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	80.3	80.3	5.8	6.6	5.8	0.3	1.1	81.5	79.1
	2015	668	83.8	83.8	5.3	5.4	5.3	0.2	0.0	84.3	83.3
Korea, Rep. of	2011	619	89.8	89.8	5.2	3.5	1.3	0.1	0.0	89.7	89.8
	2015	664	88.2	88.2	6.9	2.1	2.7	0.0	0.0	89.1	87.4
Kuwait	2011	582	44.8	44.8	18.6	22.1	10.6	3.5	0.4	42.4	47.5
	2015	492	51.2	51.2	19.5	14.1	8.0	5.1	2.0	48.4	53.4
Lithuania	2011	663	85.2	85.2	2.9	8.1	3.0	0.8	0.0	86.9	83.6
	2015	649	85.8	85.8	2.5	6.7	3.8	1.2	0.1	81.9	89.7
Morocco	2011	1077	41.4	41.4	20.0	20.6	14.6	1.6	1.8	44.3	38.9
	2015	724	37.8	37.8	28.2	19.4	11.4	2.4	0.8	37.1	38.4
Netherlands	2011	464	89.7	89.7	3.9	2.7	2.8	0.9	0.0	89.9	89.2
	2015	651	85.4	85.4	5.4	3.7	5.0	0.2	0.2	84.1	86.7
New Zealand	2011	794	76.3	76.3	7.1	7.8	8.3	0.5	0.1	75.5	77.1
	2015	904	76.6	76.6	7.9	5.7	8.8	0.9	0.1	78.9	74.4
Northern Ireland	2011	516	80.8	80.8	8.2	4.4	5.8	0.8	0.0	86.9	74.6
	2015	452	85.1	85.1	5.0	4.7	4.9	0.3	0.0	87.0	83.4
Oman	2011	1495	51.0	51.0	18.0	19.5	8.8	1.8	1.0	51.6	50.3
	2015	1307	49.6	49.6	17.5	21.2	9.9	1.4	0.4	48.5	50.5
Portugal	2011	574	89.7	89.7	4.4	3.3	2.3	0.1	0.2	90.1	89.2
	2015	685	89.6	89.6	3.6	4.4	1.9	0.6	0.0	91.1	88.1
Qatar	2011	591	60.0	60.0	15.0	12.6	10.8	1.3	0.4	57.9	61.7
	2015	728	69.0	69.0	11.2	8.6	9.3	1.2	0.7	67.9	70.0
Russian Federation	2011	642	93.5	93.5	3.7	1.1	1.3	0.3	0.0	92.6	94.4
	2015	705	89.7	89.7	6.4	1.5	1.6	0.8	0.0	90.3	89.2
Saudi Arabia	2011	672	55.5	55.5	18.2	15.0	10.3	0.4	0.5	57.8	52.9
	2015	616	56.5	56.5	19.4	12.6	10.2	0.6	0.7	59.9	53.2
Serbia	2011	625	93.1	93.1	2.8	0.9	1.6	1.2	0.4	93.4	92.9
	2015	590	90.0	90.0	5.1	1.7	1.9	0.7	0.7	91.9	88.2
Singapore	2011	903	85.2	85.2	5.5	4.8	4.3	0.1	0.0	84.7	85.8
	2015	939	88.8	88.8	4.2	3.5	3.4	0.1	0.0	91.4	86.4
Slovak Republic	2011	795	90.0	90.0	2.3	3.3	3.7	0.5	0.2	90.3	89.7
	2015	818	86.9	86.9	4.5	3.7	4.0	0.2	0.6	86.6	87.2
Slovenia	2011	641	92.4	92.4	3.3	1.7	2.1	0.6	0.0	92.6	92.2
	2015	628	90.6	90.6	4.8	2.3	1.1	0.6	0.5	90.3	90.9
Spain	2011	585	84.4	84.4	7.6	3.6	3.5	0.9	0.0	80.6	87.8
	2015	1108	84.7	84.7	7.8	3.8	2.4	0.5	0.7	83.1	86.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_01 (S041010): Life Science / Knowing Type: MC Key: A
Label: The function of seeds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	90.9	90.9	1.0	2.4	5.4	0.2	0.2	91.0	90.8
	2015	588	87.7	87.7	2.5	1.8	6.5	0.8	0.6	89.7	85.8
Turkey	2011	1083	78.8	78.8	9.4	6.2	4.9	0.7	0.0	79.0	78.5
	2015	925	79.5	79.5	12.1	5.5	2.6	0.3	0.0	79.0	80.0
United Arab Emirates	2011	2069	65.4	65.4	13.4	13.8	5.9	1.4	0.1	67.3	63.4
	2015	3039	66.2	66.2	13.8	11.4	7.5	1.0	0.1	63.5	68.7
United States	2011	1801	85.2	85.2	4.7	4.3	4.2	1.3	0.4	84.2	86.2
	2015	1448	83.0	83.0	6.6	3.9	5.4	0.9	0.1	82.9	83.1

International Avg (n=40)	2011	30306	80.0	80.0	7.3	6.4	5.2	0.9	0.3	80.3	79.8
	2015	30738	80.0	80.0	7.9	5.8	4.8	1.0	0.4	80.2	79.8

Ontario, Canada	2011	637	81.4	81.4	5.2	5.0	6.5	1.5	0.4	79.3	83.6
	2015	651	82.0	82.0	7.9	3.1	5.8	0.9	0.4	83.4	80.5
Quebec, Canada	2011	615	83.5	83.5	5.6	5.3	4.6	0.9	0.0	81.2	86.1
	2015	403	84.3	84.3	5.1	4.4	5.9	0.3	0.0	89.5	80.2
Norway (4)	2011	442	75.5	75.5	2.6	8.2	12.5	0.9	0.3	76.0	75.1
	2015	599	80.1	80.1	2.9	4.3	10.5	1.0	1.1	79.2	81.1
Abu Dhabi, UAE	2011	587	63.1	63.1	13.3	15.0	7.0	1.6	0.0	63.4	62.9
	2015	716	55.7	55.7	17.0	15.8	9.9	1.6	0.0	52.4	58.8
Dubai, UAE	2011	868	75.8	75.8	10.0	8.2	4.8	1.0	0.3	78.9	73.0
	2015	1069	80.6	80.6	7.8	4.8	6.3	0.5	0.0	78.8	82.2
Florida, US	2011	364	84.0	84.0	7.4	4.7	2.4	1.3	0.2	82.7	85.3
	2015	288	83.2	83.2	8.0	3.0	4.6	1.0	0.2	82.6	83.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_02 (S041034): Life Science / Knowing Type: MC Key: D
Label: Exercising and breathing faster

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	59.3	5.1	5.3	28.8	59.3	1.3	0.0	59.5	59.2
	2015	875	63.4	4.8	5.6	24.0	63.4	1.9	0.2	59.6	67.7
Bahrain	2011	588	53.5	13.2	5.6	26.0	53.5	1.2	0.5	55.6	51.3
	2015	598	49.9	15.6	5.1	28.2	49.9	0.9	0.3	50.6	49.2
Belgium (Flemish)	2011	692	74.9	4.6	3.8	15.1	74.9	1.5	0.1	75.6	74.2
	2015	766	77.5	5.3	4.1	11.5	77.5	1.1	0.5	79.8	75.1
Chile	2011	798	56.6	5.5	4.1	32.1	56.6	0.8	0.8	51.9	60.7
	2015	673	52.7	6.1	5.8	33.0	52.7	1.2	1.2	48.3	56.4
Chinese Taipei	2011	615	65.1	3.5	4.3	26.9	65.1	0.0	0.2	64.0	66.0
	2015	613	65.7	2.6	3.5	28.1	65.7	0.1	0.0	61.2	69.6
Croatia	2011	659	80.8	4.3	1.4	13.2	80.8	0.1	0.1	83.2	78.6
	2015	571	74.3	4.8	0.7	18.8	74.3	1.2	0.2	75.3	73.5
Czech Republic	2011	660	70.4	6.6	0.8	20.1	70.4	1.9	0.1	65.4	75.2
	2015	750	70.7	4.2	0.7	22.1	70.7	2.2	0.1	69.5	71.8
Denmark	2011	566	73.9	6.3	1.2	15.1	73.9	3.4	0.1	73.5	74.3
	2015	526	72.6	8.0	1.3	15.0	72.6	2.1	1.1	74.2	71.0
England	2011	486	64.5	4.5	3.1	26.2	64.5	1.0	0.7	58.1	70.8
	2015	569	62.2	6.4	3.6	27.3	62.2	0.5	0.0	60.4	64.4
Finland	2011	650	73.3	6.8	0.6	18.0	73.3	1.2	0.1	69.7	77.0
	2015	716	70.0	8.2	0.9	18.4	70.0	2.1	0.4	65.0	74.7
Georgia	2011	689	76.0	8.8	1.9	10.5	76.0	2.0	0.9	77.7	74.4
	2015	554	69.4	11.0	3.2	12.4	69.4	1.2	2.8	67.2	71.4
Germany	2011	581	75.5	5.0	2.9	15.3	75.5	1.2	0.0	74.7	76.4
	2015	556	67.2	6.2	4.9	19.0	67.2	2.3	0.3	65.3	69.1
Hong Kong SAR	2011	567	79.2	4.7	2.2	13.7	79.2	0.2	0.0	76.0	82.0
	2015	517	86.5	4.5	1.2	7.7	86.5	0.2	0.0	85.2	87.6
Hungary	2011	741	77.6	5.7	0.9	14.4	77.6	1.1	0.4	76.1	79.0
	2015	715	72.6	6.0	2.0	17.0	72.6	1.7	0.7	72.8	72.4
Iran, Islamic Rep. of	2011	814	70.7	8.6	2.7	14.2	70.7	2.7	1.0	76.0	65.3
	2015	543	71.2	10.6	2.0	11.5	71.2	3.0	1.6	72.0	70.4
Ireland	2011	645	60.8	8.1	4.1	26.4	60.8	0.4	0.1	59.0	62.8
	2015	623	57.6	6.7	4.6	30.1	57.6	0.9	0.1	56.3	58.9
Italy	2011	600	74.3	2.8	1.6	20.6	74.3	0.8	0.0	70.2	78.4
	2015	624	67.9	4.1	2.3	24.4	67.9	1.3	0.0	65.7	70.1
Japan	2011	629	70.8	10.8	7.0	10.7	70.8	0.4	0.2	65.9	75.7
	2015	621	67.6	14.0	5.0	12.6	67.6	0.7	0.0	61.8	73.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_02 (S041034): Life Science / Knowing Type: MC Key: D
Label: Exercising and breathing faster

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	65.4	12.5	1.5	18.9	65.4	0.6	1.1	62.9	68.0
	2015	668	74.9	9.7	2.7	12.5	74.9	0.1	0.0	77.7	72.3
Korea, Rep. of	2011	619	70.1	5.5	0.8	23.3	70.1	0.5	0.0	65.1	75.0
	2015	664	74.0	3.4	1.3	21.3	74.0	0.0	0.0	70.9	77.0
Kuwait	2011	582	40.3	26.3	7.4	20.3	40.3	5.1	0.6	43.0	37.1
	2015	492	42.5	19.4	9.6	21.5	42.5	4.5	2.4	44.3	41.3
Lithuania	2011	663	80.3	2.6	1.4	15.0	80.3	0.7	0.0	77.6	82.8
	2015	649	76.9	4.2	2.1	15.5	76.9	1.3	0.1	76.3	77.5
Morocco	2011	1071	41.6	17.1	10.7	26.0	41.6	2.6	2.1	41.1	42.1
	2015	724	49.7	17.2	6.1	23.1	49.7	2.9	1.0	51.9	47.7
Netherlands	2011	464	81.7	7.0	2.6	7.8	81.7	0.6	0.2	82.0	81.2
	2015	651	70.4	9.9	4.8	14.1	70.4	0.7	0.2	67.8	73.1
New Zealand	2011	794	60.9	7.3	5.0	25.9	60.9	0.8	0.1	60.1	61.7
	2015	904	61.6	5.9	5.3	26.1	61.6	1.1	0.1	58.5	64.8
Northern Ireland	2011	516	61.1	4.7	3.7	29.6	61.1	0.9	0.0	57.1	65.2
	2015	452	61.3	3.7	6.6	28.2	61.3	0.2	0.0	57.9	64.4
Oman	2011	1495	44.5	19.7	6.3	26.5	44.5	1.9	1.1	48.1	40.9
	2015	1304	51.8	13.7	5.1	26.8	51.8	2.3	0.3	53.1	50.7
Portugal	2011	574	70.4	5.1	3.6	19.4	70.4	1.3	0.2	72.9	68.2
	2015	685	55.5	7.2	2.8	33.5	55.5	0.9	0.1	52.9	57.9
Qatar	2011	591	55.3	11.9	7.3	24.0	55.3	1.2	0.4	58.4	52.7
	2015	728	60.1	15.6	4.3	17.8	60.1	1.5	0.7	60.5	59.8
Russian Federation	2011	642	84.5	4.8	1.3	8.6	84.5	0.7	0.0	84.1	85.0
	2015	705	84.5	4.5	0.4	10.1	84.5	0.5	0.0	84.4	84.6
Saudi Arabia	2011	668	51.2	15.8	8.5	22.9	51.2	1.1	0.5	51.2	51.1
	2015	614	48.8	14.3	7.5	28.1	48.8	0.6	0.7	52.6	45.2
Serbia	2011	625	66.6	8.7	0.5	21.1	66.6	2.5	0.6	69.7	63.5
	2015	590	67.2	7.1	0.6	22.2	67.2	2.2	0.7	63.9	70.2
Singapore	2011	903	85.0	4.4	2.6	7.9	85.0	0.2	0.0	83.6	86.4
	2015	939	83.3	5.9	3.6	7.2	83.3	0.1	0.0	80.1	86.1
Slovak Republic	2011	795	71.8	5.7	2.8	18.7	71.8	0.8	0.2	67.2	77.0
	2015	818	73.5	11.0	1.7	12.3	73.5	0.9	0.6	72.5	74.4
Slovenia	2011	638	69.3	14.6	1.4	14.0	69.3	0.6	0.1	68.0	70.7
	2015	628	63.0	9.6	1.0	24.3	63.0	1.6	0.5	63.2	62.8
Spain	2011	585	78.5	4.4	1.1	14.8	78.5	1.2	0.0	75.6	81.1
	2015	1108	69.2	4.9	3.2	20.4	69.2	1.6	0.7	69.8	68.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_02 (S041034): Life Science / Knowing Type: MC Key: D
Label: Exercising and breathing faster

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	64.4	8.1	1.2	25.6	64.4	0.5	0.2	60.8	67.4
	2015	588	65.6	8.9	1.0	21.3	65.6	2.6	0.6	59.8	71.2
Turkey	2011	1083	70.0	11.3	2.6	15.3	70.0	0.7	0.1	71.3	68.9
	2015	925	74.5	10.3	2.7	11.5	74.5	1.1	0.0	74.3	74.6
United Arab Emirates	2011	2069	59.7	13.8	4.5	20.6	59.7	1.3	0.1	60.2	59.2
	2015	3039	58.9	10.8	4.9	23.4	58.9	1.8	0.1	56.3	61.3
United States	2011	1801	65.8	4.2	3.1	25.6	65.8	0.7	0.6	63.9	67.9
	2015	1448	63.4	4.9	3.7	27.0	63.4	0.9	0.1	59.8	67.2

International Avg (n=40)	2011	30293	67.4	8.3	3.3	19.5	67.4	1.2	0.3	66.4	68.4
	2015	30733	66.2	8.3	3.4	20.2	66.2	1.4	0.5	65.0	67.5

Ontario, Canada	2011	637	60.3	3.7	3.3	30.3	60.3	2.0	0.5	58.8	61.7
	2015	651	61.2	5.7	4.8	27.0	61.2	0.7	0.7	59.8	62.6
Quebec, Canada	2011	615	56.7	4.0	4.5	34.1	56.7	0.8	0.0	54.7	59.0
	2015	403	58.0	3.8	11.3	26.3	58.0	0.6	0.0	58.2	57.9
Norway (4)	2011	442	59.3	4.5	6.7	27.0	59.3	2.2	0.3	59.6	58.9
	2015	599	63.0	5.3	7.9	21.1	63.0	1.5	1.2	63.5	62.4
Abu Dhabi, UAE	2011	587	56.2	15.2	4.1	23.1	56.2	1.2	0.2	52.9	59.4
	2015	716	52.2	9.9	5.2	29.9	52.2	2.8	0.0	53.0	51.5
Dubai, UAE	2011	868	62.8	11.3	3.7	20.7	62.8	1.3	0.3	67.1	58.8
	2015	1069	69.0	8.5	4.4	17.3	69.0	0.7	0.0	66.3	71.4
Florida, US	2011	364	68.3	5.7	2.3	22.1	68.3	1.4	0.2	68.7	67.9
	2015	288	64.2	6.4	4.2	23.5	64.2	1.4	0.2	64.6	64.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_03 (S041017): Life Science / Applying Type: MC Key: A
Label: Animals take care of their young

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	48.9	48.9	4.0	43.0	2.9	1.2	0.0	51.4	46.5
	2015	875	47.0	47.0	2.7	45.1	3.2	1.7	0.2	47.4	46.6
Bahrain	2011	588	31.8	31.8	7.3	51.0	7.0	2.2	0.8	38.1	25.5
	2015	598	31.6	31.6	7.5	49.3	9.8	1.5	0.3	33.3	29.8
Belgium (Flemish)	2011	692	44.2	44.2	2.9	49.1	1.9	1.8	0.1	41.9	46.5
	2015	766	36.4	36.4	3.4	56.6	2.0	1.1	0.6	35.3	37.5
Chile	2011	798	40.9	40.9	5.0	46.3	4.9	1.8	1.0	42.8	39.2
	2015	673	38.2	38.2	4.6	50.5	3.5	2.0	1.2	34.6	41.1
Chinese Taipei	2011	615	54.4	54.4	2.1	42.5	0.9	0.0	0.2	52.0	56.4
	2015	613	47.0	47.0	3.2	47.4	1.7	0.6	0.0	52.2	42.5
Croatia	2011	659	28.8	28.8	1.8	64.4	2.9	2.0	0.1	28.2	29.4
	2015	571	28.0	28.0	1.1	67.9	1.7	1.0	0.2	26.4	29.4
Czech Republic	2011	660	45.0	45.0	4.1	45.8	2.0	3.0	0.1	45.3	44.7
	2015	750	55.9	55.9	2.3	38.2	0.5	2.9	0.1	57.0	54.9
Denmark	2011	566	46.1	46.1	4.2	44.9	1.4	3.3	0.1	44.8	47.4
	2015	526	51.8	51.8	2.8	40.8	2.0	1.3	1.4	49.4	54.1
England	2011	486	40.2	40.2	2.6	52.0	3.3	1.2	0.7	41.5	39.0
	2015	569	32.2	32.2	2.6	60.9	3.1	1.2	0.0	34.4	29.6
Finland	2011	650	48.3	48.3	9.2	37.4	3.8	1.2	0.1	46.7	50.0
	2015	716	42.5	42.5	8.0	42.8	3.6	2.5	0.7	48.6	36.7
Georgia	2011	689	51.0	51.0	8.7	29.2	6.5	3.6	1.0	50.3	51.5
	2015	554	56.3	56.3	10.1	23.7	6.0	1.0	2.8	58.6	54.3
Germany	2011	581	50.5	50.5	2.5	42.9	1.5	2.6	0.0	48.1	52.8
	2015	556	52.4	52.4	2.2	40.7	1.7	2.7	0.3	56.8	47.9
Hong Kong SAR	2011	567	37.8	37.8	10.0	46.5	4.9	0.8	0.0	35.9	39.5
	2015	517	50.0	50.0	5.2	40.0	4.0	0.8	0.0	52.5	47.8
Hungary	2011	741	45.1	45.1	4.7	47.3	1.1	1.6	0.4	44.7	45.5
	2015	715	51.5	51.5	3.2	37.6	2.9	4.0	0.7	48.9	54.3
Iran, Islamic Rep. of	2011	814	43.8	43.8	6.3	40.7	6.3	1.8	1.2	41.6	46.0
	2015	543	33.2	33.2	9.2	45.6	6.9	2.8	2.3	36.0	30.3
Ireland	2011	645	33.8	33.8	6.2	50.6	7.6	1.6	0.1	35.1	32.5
	2015	623	29.9	29.9	4.2	59.3	5.7	0.8	0.1	26.7	32.9
Italy	2011	600	42.4	42.4	4.2	49.6	2.8	1.2	0.0	44.1	40.6
	2015	624	39.4	39.4	3.4	54.7	1.6	0.8	0.3	42.7	36.1
Japan	2011	629	50.6	50.6	4.8	42.3	1.3	0.7	0.2	51.5	49.8
	2015	621	42.3	42.3	4.5	49.6	3.1	0.5	0.0	44.0	40.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_03 (S041017): Life Science / Applying Type: MC Key: A
Label: Animals take care of their young

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	44.0	44.0	4.7	44.2	4.0	1.9	1.2	41.3	46.7
	2015	668	58.9	58.9	3.4	33.7	3.7	0.4	0.0	60.6	57.3
Korea, Rep. of	2011	619	54.2	54.2	4.6	39.4	1.5	0.3	0.0	53.4	54.9
	2015	664	52.5	52.5	12.8	33.3	1.1	0.2	0.0	51.0	54.0
Kuwait	2011	579	27.2	27.2	14.3	36.7	12.7	8.3	0.8	26.7	27.7
	2015	492	28.2	28.2	11.3	39.6	10.3	8.1	2.5	26.2	30.6
Lithuania	2011	663	49.4	49.4	2.4	43.2	2.5	2.5	0.0	51.1	47.9
	2015	649	44.9	44.9	2.1	48.6	1.7	2.6	0.1	47.9	41.9
Morocco	2011	1052	31.7	31.7	15.2	35.9	12.7	1.9	2.6	34.3	29.2
	2015	724	30.6	30.6	13.3	39.1	12.7	3.2	1.1	30.4	30.7
Netherlands	2011	464	57.8	57.8	3.4	37.5	0.2	0.9	0.2	58.1	57.5
	2015	651	47.2	47.2	3.4	47.7	0.7	0.8	0.2	44.3	50.2
New Zealand	2011	794	42.3	42.3	4.9	47.7	4.7	0.4	0.1	40.5	44.1
	2015	904	41.7	41.7	4.5	49.7	3.3	0.8	0.1	42.4	40.9
Northern Ireland	2011	516	32.4	32.4	3.8	57.1	5.5	1.3	0.0	32.9	31.9
	2015	451	37.2	37.2	4.9	56.2	1.8	0.0	0.0	38.0	36.5
Oman	2011	1495	30.8	30.8	13.8	43.1	8.9	2.1	1.3	31.9	29.7
	2015	1302	40.2	40.2	10.0	38.8	6.9	3.5	0.5	40.0	40.4
Portugal	2011	574	41.2	41.2	2.1	52.9	1.7	1.9	0.2	39.4	42.7
	2015	685	34.1	34.1	3.9	58.7	1.7	1.6	0.1	34.9	33.3
Qatar	2011	591	30.2	30.2	9.9	46.1	9.9	3.6	0.4	31.1	29.4
	2015	728	47.7	47.7	7.9	36.6	5.3	1.8	0.7	45.8	49.7
Russian Federation	2011	642	51.6	51.6	3.6	41.7	2.6	0.4	0.0	48.4	54.5
	2015	705	50.2	50.2	3.8	42.5	2.7	0.8	0.0	53.4	47.2
Saudi Arabia	2011	672	31.1	31.1	11.8	47.3	7.3	2.0	0.5	32.3	29.8
	2015	615	30.7	30.7	11.8	44.3	10.1	2.4	0.7	28.6	32.6
Serbia	2011	625	26.3	26.3	2.1	66.4	1.8	2.4	1.1	23.9	28.7
	2015	590	34.0	34.0	3.4	57.3	3.0	1.6	0.7	32.0	35.9
Singapore	2011	903	69.1	69.1	1.8	27.1	1.7	0.3	0.0	68.8	69.5
	2015	939	70.5	70.5	1.1	26.1	1.9	0.3	0.0	71.4	69.8
Slovak Republic	2011	795	47.4	47.4	3.5	45.9	1.4	1.5	0.3	47.3	47.5
	2015	818	49.7	49.7	3.0	42.5	2.9	1.2	0.7	50.6	48.9
Slovenia	2011	640	45.1	45.1	2.6	48.4	1.9	1.9	0.1	43.9	46.2
	2015	628	44.6	44.6	5.1	45.1	2.8	1.8	0.7	43.5	45.4
Spain	2011	585	38.4	38.4	2.4	55.1	2.0	2.1	0.0	37.4	39.3
	2015	1108	32.4	32.4	2.5	61.1	1.9	1.5	0.7	30.1	34.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_03 (S041017): Life Science / Applying Type: MC Key: A
Label: Animals take care of their young

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	45.2	45.2	3.0	48.9	1.6	1.0	0.2	40.1	49.2
	2015	588	43.7	43.7	3.7	48.7	2.1	1.2	0.6	45.7	41.8
Turkey	2011	1083	43.9	43.9	3.0	47.6	4.5	0.9	0.1	38.8	48.4
	2015	925	40.9	40.9	3.1	51.4	3.8	0.8	0.0	38.3	43.4
United Arab Emirates	2011	2069	36.5	36.5	9.1	44.6	7.2	2.4	0.2	36.9	36.1
	2015	3039	35.6	35.6	9.2	45.3	5.9	3.8	0.2	35.9	35.3
United States	2011	1801	52.2	52.2	2.2	41.4	1.8	1.7	0.7	53.3	51.1
	2015	1448	49.1	49.1	2.7	44.2	2.7	1.1	0.1	46.6	51.8
International Avg (n=40)	2011	30277	42.8	42.8	5.4	45.6	4.0	1.8	0.4	42.4	43.1
	2015	30731	42.8	42.8	5.2	46.0	3.8	1.7	0.5	43.1	42.5
Ontario, Canada	2011	637	44.3	44.3	3.7	45.7	3.6	2.2	0.5	46.1	42.6
	2015	650	45.5	45.5	4.2	45.0	3.3	1.3	0.7	45.8	45.2
Quebec, Canada	2011	615	46.1	46.1	2.6	48.0	2.3	1.0	0.0	47.0	45.1
	2015	403	42.7	42.7	2.8	51.5	2.5	0.4	0.1	41.0	44.0
Norway (4)	2011	442	47.7	47.7	9.6	37.5	3.4	1.3	0.5	52.3	43.2
	2015	599	43.6	43.6	6.2	43.0	4.1	1.7	1.5	46.1	41.0
Abu Dhabi, UAE	2011	587	38.1	38.1	11.5	41.8	6.3	2.1	0.2	36.0	40.3
	2015	716	31.3	31.3	11.2	41.8	9.0	6.5	0.2	31.0	31.7
Dubai, UAE	2011	868	36.3	36.3	6.5	50.0	4.7	2.0	0.4	37.0	35.7
	2015	1069	42.7	42.7	6.9	46.1	3.1	1.2	0.0	44.5	41.1
Florida, US	2011	364	52.9	52.9	1.3	42.2	1.6	1.6	0.5	50.4	55.6
	2015	288	48.0	48.0	2.2	45.9	0.8	2.7	0.2	45.7	50.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_04 (S041124): Life Science / Applying Type: MC Key: A
Label: Advantage for monarch butterfly

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	47.5	47.5	12.5	14.9	23.6	1.5	0.0	46.9	48.1
	2015	875	49.3	49.3	10.7	15.8	23.0	0.8	0.2	48.0	50.9
Bahrain	2011	588	45.8	45.8	16.6	12.1	22.5	2.3	0.8	44.3	47.3
	2015	598	35.5	35.5	17.9	13.5	31.4	1.4	0.3	40.3	30.7
Belgium (Flemish)	2011	692	42.7	42.7	11.2	18.4	26.4	1.1	0.2	37.7	47.7
	2015	766	44.3	44.3	11.2	20.5	22.1	1.3	0.6	45.5	43.0
Chile	2011	798	34.8	34.8	14.2	17.4	30.3	2.1	1.0	35.4	34.3
	2015	673	42.2	42.2	12.0	18.8	23.3	2.6	1.2	37.7	45.9
Chinese Taipei	2011	615	47.3	47.3	11.9	23.1	17.2	0.3	0.2	43.8	50.2
	2015	613	50.8	50.8	9.7	19.8	19.3	0.4	0.0	47.8	53.5
Croatia	2011	659	36.3	36.3	8.2	21.9	30.1	3.4	0.1	37.3	35.4
	2015	571	41.4	41.4	11.8	20.1	24.3	2.2	0.2	36.6	45.4
Czech Republic	2011	660	62.8	62.8	6.0	12.1	16.2	2.7	0.1	66.1	59.7
	2015	750	62.5	62.5	4.8	16.7	12.8	3.0	0.1	64.9	60.3
Denmark	2011	566	55.4	55.4	9.2	17.5	14.8	3.1	0.1	54.5	56.3
	2015	526	64.1	64.1	6.5	11.9	13.2	2.7	1.6	62.8	65.4
England	2011	486	52.1	52.1	9.5	14.2	22.0	1.5	0.7	51.2	53.0
	2015	569	52.2	52.2	9.6	11.7	25.7	0.6	0.2	47.6	57.6
Finland	2011	650	67.5	67.5	3.7	11.7	15.6	1.3	0.1	65.3	69.8
	2015	716	57.8	57.8	6.3	18.2	14.7	2.2	0.7	60.3	55.5
Georgia	2011	689	40.1	40.1	12.3	16.1	26.2	4.2	1.0	48.7	32.6
	2015	554	39.0	39.0	12.1	20.5	23.0	2.6	2.8	41.7	36.6
Germany	2011	581	50.7	50.7	7.1	9.9	28.4	3.9	0.0	51.4	50.1
	2015	556	55.0	55.0	10.7	9.9	19.6	4.6	0.3	56.9	52.9
Hong Kong SAR	2011	567	36.2	36.2	12.3	36.9	12.7	1.8	0.0	37.2	35.4
	2015	517	40.5	40.5	10.6	35.3	13.3	0.3	0.0	36.1	44.4
Hungary	2011	741	59.3	59.3	3.2	14.4	21.3	1.4	0.4	59.0	59.5
	2015	715	56.1	56.1	5.4	11.1	23.1	3.1	1.2	56.2	56.1
Iran, Islamic Rep. of	2011	815	34.2	34.2	17.3	21.0	21.0	5.3	1.2	35.4	32.9
	2015	543	34.5	34.5	18.4	19.9	21.7	2.4	3.1	32.9	36.0
Ireland	2011	645	50.2	50.2	14.2	10.0	24.7	0.8	0.1	50.1	50.3
	2015	623	50.8	50.8	14.2	14.3	19.9	0.7	0.1	50.4	51.2
Italy	2011	600	44.9	44.9	7.5	14.4	30.3	3.0	0.0	45.3	44.4
	2015	624	45.7	45.7	7.1	16.6	25.9	4.6	0.3	43.7	47.6
Japan	2011	629	50.1	50.1	12.4	16.0	20.1	1.1	0.2	43.9	56.3
	2015	621	49.5	49.5	12.3	18.0	19.3	0.8	0.0	45.8	53.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_04 (S041124): Life Science / Applying Type: MC Key: A
Label: Advantage for monarch butterfly

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	37.1	37.1	18.7	21.3	19.6	2.0	1.3	35.4	39.0
	2015	668	43.5	43.5	13.2	20.2	22.4	0.7	0.0	43.2	43.9
Korea, Rep. of	2011	619	47.6	47.6	6.7	25.4	19.5	0.8	0.0	44.7	50.4
	2015	664	53.4	53.4	5.1	23.8	17.2	0.5	0.0	51.3	55.3
Kuwait	2011	579	28.6	28.6	15.9	25.9	23.2	5.6	0.8	29.7	27.4
	2015	493	32.0	32.0	18.3	16.3	21.9	8.6	2.8	32.5	30.6
Lithuania	2011	663	55.0	55.0	9.0	16.7	16.2	3.1	0.0	50.8	58.8
	2015	649	51.1	51.1	11.2	13.5	21.0	3.1	0.1	51.6	50.5
Morocco	2011	1069	35.5	35.5	23.0	19.6	17.3	1.9	2.6	39.6	31.9
	2015	729	37.9	37.9	19.7	16.8	20.2	4.0	1.2	38.4	37.5
Netherlands	2011	464	55.4	55.4	6.2	13.1	24.0	1.1	0.2	55.6	55.3
	2015	651	59.0	59.0	7.8	13.6	18.0	1.2	0.2	60.2	57.8
New Zealand	2011	794	50.9	50.9	13.8	13.0	21.9	0.3	0.1	47.7	54.2
	2015	904	51.8	51.8	11.9	13.3	21.4	1.4	0.1	49.8	53.9
Northern Ireland	2011	516	49.8	49.8	10.0	16.2	23.3	0.7	0.0	46.6	53.0
	2015	447	52.4	52.4	11.2	14.3	21.9	0.1	0.0	50.9	53.8
Oman	2011	1495	31.3	31.3	22.6	21.4	20.3	2.9	1.3	32.7	30.0
	2015	1308	34.0	34.0	18.8	20.6	23.8	2.2	0.6	33.2	34.6
Portugal	2011	574	37.5	37.5	10.5	11.9	37.2	2.7	0.2	31.7	42.7
	2015	685	39.1	39.1	12.4	13.7	33.0	1.6	0.3	36.2	41.8
Qatar	2011	591	37.6	37.6	16.8	11.6	30.9	2.6	0.5	42.6	33.4
	2015	728	36.6	36.6	13.9	23.3	23.6	2.0	0.7	37.6	35.4
Russian Federation	2011	642	49.8	49.8	6.8	24.8	17.4	1.2	0.0	47.6	51.8
	2015	705	52.4	52.4	7.6	20.0	17.6	2.4	0.0	51.2	53.6
Saudi Arabia	2011	674	34.5	34.5	23.2	20.4	20.0	1.3	0.5	37.7	30.9
	2015	615	33.0	33.0	21.2	22.2	21.0	1.8	0.8	32.2	33.7
Serbia	2011	625	33.1	33.1	18.0	14.6	28.3	4.8	1.2	33.1	33.1
	2015	590	43.7	43.7	16.2	14.3	22.3	3.0	0.7	45.0	42.4
Singapore	2011	903	43.0	43.0	8.3	15.0	33.6	0.1	0.0	41.4	44.6
	2015	939	49.6	49.6	5.6	13.9	30.6	0.2	0.0	49.2	50.0
Slovak Republic	2011	795	62.6	62.6	8.2	13.6	14.2	1.0	0.3	61.9	63.4
	2015	818	61.8	61.8	7.6	13.3	14.1	2.5	0.7	61.5	62.0
Slovenia	2011	641	40.6	40.6	6.6	23.0	26.0	3.5	0.3	39.4	41.7
	2015	628	52.6	52.6	9.3	17.1	17.7	2.5	0.8	53.6	51.9
Spain	2011	585	44.7	44.7	10.3	17.0	25.0	2.8	0.2	43.3	46.0
	2015	1108	50.0	50.0	11.3	15.7	20.4	1.9	0.8	50.0	49.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_04 (S041124): Life Science / Applying Type: MC Key: A
Label: Advantage for monarch butterfly

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	50.9	50.9	9.1	13.7	24.3	1.8	0.2	53.9	48.6
	2015	588	57.5	57.5	10.3	9.8	19.5	2.3	0.6	59.5	55.3
Turkey	2011	1083	34.8	34.8	16.7	13.2	33.2	2.0	0.1	30.6	38.5
	2015	925	42.5	42.5	15.5	10.3	30.9	0.8	0.0	42.7	42.3
United Arab Emirates	2011	2069	38.5	38.5	16.3	17.5	25.1	2.5	0.2	39.4	37.5
	2015	3039	38.2	38.2	16.1	18.0	25.0	2.5	0.2	37.5	38.8
United States	2011	1801	44.8	44.8	9.4	16.8	27.0	1.3	0.7	43.6	46.2
	2015	1448	51.8	51.8	9.0	16.7	20.6	1.7	0.1	50.6	53.2

International Avg (n=40)	2011	30298	45.0	45.0	11.9	17.2	23.3	2.2	0.4	44.6	45.5
	2015	30739	47.4	47.4	11.6	16.8	21.5	2.1	0.6	46.8	47.9

Ontario, Canada	2011	637	49.9	49.9	10.2	14.6	23.1	1.6	0.6	47.3	52.6
	2015	651	53.1	53.1	9.9	15.6	19.4	1.3	0.7	51.9	54.5
Quebec, Canada	2011	615	41.9	41.9	13.7	19.0	23.2	2.2	0.0	41.9	41.8
	2015	403	45.0	45.0	8.7	25.0	20.7	0.5	0.1	43.7	46.1
Norway (4)	2011	442	37.9	37.9	15.5	24.6	19.1	2.4	0.5	32.4	43.1
	2015	599	36.4	36.4	15.9	22.8	19.8	3.6	1.5	35.4	37.4
Abu Dhabi, UAE	2011	587	37.9	37.9	16.6	19.2	23.5	2.6	0.2	39.5	36.3
	2015	716	34.6	34.6	18.8	17.2	26.3	2.8	0.2	33.3	35.8
Dubai, UAE	2011	868	42.4	42.4	13.0	15.2	26.9	2.1	0.4	40.7	44.0
	2015	1069	44.1	44.1	13.0	17.2	23.5	2.4	0.0	41.4	46.4
Florida, US	2011	364	49.1	49.1	8.5	16.2	24.7	1.1	0.5	45.1	53.5
	2015	288	50.9	50.9	9.3	17.2	20.7	1.6	0.2	47.1	54.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_05 (S041186): Physical Science / Applying Type: CR 1 Point
Label: Freezing point of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	16.2	79.7	3.9	0.2	16.2	13.7	18.7
	2015	875	17.7	79.2	2.6	0.5	17.7	15.0	20.9
Bahrain	2011	588	16.1	72.5	10.2	1.1	16.1	14.1	18.1
	2015	598	11.4	79.3	8.8	0.4	11.4	11.4	11.4
Belgium (Flemish)	2011	692	27.0	70.3	2.6	0.2	27.0	25.7	28.3
	2015	766	38.4	57.5	3.5	0.6	38.4	34.2	42.8
Chile	2011	798	7.6	76.8	14.4	1.2	7.6	6.0	9.1
	2015	673	5.9	75.4	17.1	1.7	5.9	5.3	6.4
Chinese Taipei	2011	615	13.5	80.3	6.0	0.2	13.5	14.2	12.9
	2015	613	17.4	78.9	3.7	0.0	17.4	17.7	17.1
Croatia	2011	659	57.0	38.2	4.7	0.1	57.0	57.5	56.6
	2015	571	62.5	32.9	3.8	0.7	62.5	60.8	64.0
Czech Republic	2011	660	45.4	50.4	4.1	0.1	45.4	40.7	50.0
	2015	750	46.0	49.7	4.2	0.1	46.0	42.5	49.1
Denmark	2011	566	62.2	31.0	6.7	0.1	62.2	61.6	62.8
	2015	526	36.8	57.5	3.8	1.9	36.8	33.8	39.8
England	2011	486	30.6	67.0	1.6	0.9	30.6	26.2	34.9
	2015	569	33.9	63.5	2.4	0.2	33.9	29.7	38.9
Finland	2011	650	46.6	52.0	1.3	0.1	46.6	41.4	51.9
	2015	716	38.2	58.9	2.2	0.7	38.2	34.8	41.4
Georgia	2011	689	18.9	53.0	26.8	1.3	18.9	19.4	18.4
	2015	554	16.7	58.4	21.6	3.3	16.7	17.7	15.8
Germany	2011	581	48.0	47.2	4.8	0.0	48.0	45.5	50.6
	2015	556	39.9	54.2	5.5	0.3	39.9	36.4	43.7
Hong Kong SAR	2011	567	22.7	73.8	3.5	0.0	22.7	17.6	27.2
	2015	517	27.4	71.7	0.9	0.0	27.4	22.0	32.3
Hungary	2011	740	44.7	52.9	2.0	0.4	44.7	40.2	48.7
	2015	715	37.6	59.4	1.8	1.2	37.6	35.2	40.1
Iran, Islamic Rep. of	2011	815	11.1	68.3	18.8	1.8	11.1	11.8	10.4
	2015	543	8.6	70.3	17.9	3.1	8.6	6.8	10.5
Ireland	2011	645	24.8	70.5	4.6	0.1	24.8	21.9	27.8
	2015	623	19.5	77.2	3.2	0.1	19.5	18.1	20.9
Italy	2011	600	17.2	72.6	9.6	0.5	17.2	14.7	19.8
	2015	624	15.4	71.9	12.5	0.3	15.4	12.9	17.8
Japan	2011	629	77.9	20.1	1.7	0.2	77.9	77.5	78.4
	2015	621	82.9	16.2	0.9	0.0	82.9	84.0	81.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_05 (S041186): Physical Science / Applying Type: CR 1 Point
Label: Freezing point of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	44.2	43.1	11.1	1.6	44.2	41.6	47.0
	2015	668	52.5	40.9	6.4	0.3	52.5	50.7	54.2
Korea, Rep. of	2011	619	15.5	82.7	1.9	0.0	15.5	11.6	19.3
	2015	664	21.6	77.5	0.9	0.0	21.6	19.9	23.1
Kuwait	2011	586	15.2	59.3	24.3	1.3	15.2	16.6	13.6
	2015	493	19.7	48.5	28.9	2.8	19.7	22.6	17.1
Lithuania	2011	663	9.4	86.3	4.1	0.1	9.4	5.1	13.4
	2015	649	11.8	83.1	5.0	0.1	11.8	8.5	15.2
Morocco	2011	1128	5.2	51.1	41.0	2.7	5.2	5.9	4.5
	2015	729	6.4	64.2	27.4	2.0	6.4	7.5	5.3
Netherlands	2011	464	35.4	61.9	2.5	0.2	35.4	34.3	37.3
	2015	651	25.0	71.7	3.1	0.2	25.0	26.3	23.6
New Zealand	2011	794	17.8	79.0	3.1	0.1	17.8	16.8	18.8
	2015	904	17.8	79.3	2.8	0.1	17.8	14.3	21.4
Northern Ireland	2011	516	28.8	67.9	3.4	0.0	28.8	26.3	31.3
	2015	452	30.9	67.9	1.2	0.0	30.9	29.9	31.9
Oman	2011	1495	19.4	61.1	17.9	1.6	19.4	20.1	18.7
	2015	1310	25.3	57.6	16.3	0.8	25.3	26.3	24.4
Portugal	2011	574	29.6	63.4	6.8	0.2	29.6	25.3	33.5
	2015	685	18.3	77.4	4.0	0.3	18.3	17.3	19.2
Qatar	2011	591	15.0	70.9	13.6	0.5	15.0	13.3	16.4
	2015	728	17.2	73.1	9.1	0.7	17.2	14.4	20.0
Russian Federation	2011	642	31.8	64.8	3.2	0.2	31.8	27.5	35.9
	2015	705	31.4	65.2	3.2	0.2	31.4	27.3	35.2
Saudi Arabia	2011	674	23.2	66.5	9.7	0.6	23.2	25.6	20.5
	2015	618	18.7	56.1	24.1	1.1	18.7	17.4	20.0
Serbia	2011	625	21.6	69.7	7.1	1.5	21.6	22.3	20.9
	2015	590	19.6	69.6	9.9	0.8	19.6	15.9	23.0
Singapore	2011	903	50.2	49.1	0.7	0.0	50.2	46.1	54.3
	2015	939	50.6	49.1	0.3	0.0	50.6	50.9	50.3
Slovak Republic	2011	795	22.5	74.2	3.0	0.3	22.5	20.8	24.4
	2015	818	24.2	70.0	5.0	0.8	24.2	21.5	26.6
Slovenia	2011	641	19.1	75.8	4.8	0.3	19.1	18.1	20.0
	2015	628	30.6	62.7	5.4	1.3	30.6	20.1	39.0
Spain	2011	585	18.7	69.6	11.5	0.2	18.7	17.4	19.9
	2015	1108	11.9	82.0	5.2	0.9	11.9	12.6	11.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_05 (S041186): Physical Science / Applying Type: CR 1 Point
Label: Freezing point of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	45.3	49.1	5.5	0.2	45.3	44.0	46.3
	2015	588	50.5	44.7	4.0	0.8	50.5	47.5	53.4
Turkey	2011	1083	14.8	76.1	9.1	0.1	14.8	13.0	16.3
	2015	925	13.3	78.4	8.3	0.0	13.3	14.1	12.5
United Arab Emirates	2011	2069	18.8	67.7	13.1	0.3	18.8	19.4	18.3
	2015	3039	24.6	62.8	12.4	0.3	24.6	23.1	25.9
United States	2011	1801	22.2	75.0	1.8	0.9	22.2	19.7	25.0
	2015	1448	19.1	78.3	2.0	0.5	19.1	18.5	19.8

International Avg (n=40)	2011	30363	27.8	63.5	8.2	0.5	27.8	26.0	29.5
	2015	30749	27.4	64.3	7.5	0.7	27.4	25.6	29.2

Ontario, Canada	2011	637	36.1	58.9	4.3	0.6	36.1	33.9	38.4
	2015	651	34.7	61.2	3.3	0.8	34.7	30.6	38.7
Quebec, Canada	2011	615	24.4	72.1	3.5	0.0	24.4	19.8	29.5
	2015	403	30.6	67.4	2.0	0.1	30.6	31.7	29.7
Norway (4)	2011	442	39.8	53.6	5.9	0.7	39.8	38.2	41.3
	2015	599	29.7	62.8	5.3	2.3	29.7	22.8	37.0
Abu Dhabi, UAE	2011	587	19.1	69.9	10.5	0.6	19.1	20.2	18.0
	2015	716	13.7	68.8	17.1	0.4	13.7	14.2	13.3
Dubai, UAE	2011	868	21.5	65.0	13.1	0.5	21.5	20.8	22.1
	2015	1069	34.3	61.3	4.4	0.0	34.3	30.6	37.5
Florida, US	2011	364	16.7	80.7	2.1	0.5	16.7	15.8	17.8
	2015	288	19.0	79.4	1.4	0.2	19.0	14.6	22.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_06 (S041037): Life Science / Reasoning Type: CR 2 Points
Label: Pos. or neg. effect of activity

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	49.4	21.7	26.9	1.6	0.4	71.1	49.4	53.6	45.4
	2015	875	49.1	24.1	23.7	2.6	0.5	73.2	49.1	53.1	44.3
Bahrain	2011	588	18.8	18.4	56.1	5.4	1.3	37.2	18.8	19.0	18.6
	2015	598	20.2	22.2	52.3	4.5	0.8	42.4	20.2	19.5	20.9
Belgium (Flemish)	2011	692	44.8	29.6	24.8	0.6	0.2	74.5	44.8	45.9	43.8
	2015	766	42.5	33.7	21.6	1.7	0.6	76.2	42.5	41.1	43.9
Chile	2011	798	46.6	26.0	21.0	4.7	1.7	72.6	46.6	43.3	49.5
	2015	673	43.6	27.2	21.6	5.4	2.2	70.8	43.6	41.9	45.1
Chinese Taipei	2011	615	47.7	29.7	21.9	0.5	0.2	77.4	47.7	48.4	47.1
	2015	613	55.4	27.4	16.7	0.5	0.0	82.8	55.4	56.6	54.3
Croatia	2011	659	49.6	35.4	12.4	2.4	0.2	84.9	49.6	51.0	48.2
	2015	571	52.5	35.3	10.1	1.4	0.7	87.8	52.5	55.8	49.8
Czech Republic	2011	660	41.2	22.6	30.2	5.8	0.1	63.8	41.2	36.0	46.3
	2015	750	45.5	25.0	25.0	4.4	0.1	70.5	45.5	41.6	49.1
Denmark	2011	566	37.3	32.1	26.6	3.8	0.1	69.4	37.3	35.8	38.8
	2015	526	37.5	29.9	27.4	3.1	2.1	67.4	37.5	38.6	36.5
England	2011	486	57.3	24.8	15.8	1.3	0.9	82.0	57.3	55.6	58.9
	2015	569	52.1	27.6	19.6	0.5	0.2	79.7	52.1	53.4	50.5
Finland	2011	650	61.5	22.0	14.2	2.2	0.1	83.5	61.5	58.1	64.9
	2015	716	53.5	23.3	20.2	2.3	0.8	76.8	53.5	53.1	53.9
Georgia	2011	685	20.9	24.0	40.8	12.2	2.1	44.9	20.9	23.4	18.8
	2015	554	19.5	28.8	34.8	13.0	3.9	48.3	19.5	21.0	18.2
Germany	2011	581	45.8	24.9	25.6	3.7	0.0	70.7	45.8	42.5	49.1
	2015	556	41.3	27.1	28.2	2.8	0.5	68.4	41.3	40.7	42.1
Hong Kong SAR	2011	567	40.4	35.1	23.3	1.3	0.0	75.5	40.4	43.8	37.4
	2015	517	50.1	28.6	20.6	0.8	0.0	78.7	50.1	52.7	47.7
Hungary	2011	741	50.3	21.3	24.0	3.8	0.6	71.7	50.3	48.9	51.6
	2015	715	52.3	22.7	20.7	2.9	1.4	75.0	52.3	50.3	54.4
Iran, Islamic Rep. of	2011	815	38.2	19.4	32.1	8.0	2.3	57.6	38.2	36.3	40.1
	2015	543	36.6	20.8	34.0	5.5	3.2	57.4	36.6	42.5	30.7
Ireland	2011	645	47.8	22.2	28.4	1.4	0.1	70.0	47.8	51.1	44.4
	2015	623	47.2	24.8	25.7	2.1	0.2	71.9	47.2	50.9	43.6
Italy	2011	600	42.0	31.9	23.8	1.6	0.6	73.9	42.0	42.7	41.4
	2015	624	40.9	34.2	21.4	2.9	0.6	75.0	40.9	42.1	39.7
Japan	2011	629	55.5	30.8	12.9	0.4	0.4	86.3	55.5	54.1	56.8
	2015	621	53.2	31.9	14.9	0.0	0.0	85.1	53.2	53.5	52.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_06 (S041037): Life Science / Reasoning Type: CR 2 Points
Label: Pos. or neg. effect of activity

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	32.1	34.3	23.6	8.2	1.8	66.4	32.1	31.1	33.1
	2015	668	40.2	32.5	23.5	3.5	0.3	72.7	40.2	40.1	40.3
Korea, Rep. of	2011	619	71.7	19.0	9.2	0.0	0.0	90.8	71.7	70.5	72.9
	2015	664	77.0	17.4	5.2	0.4	0.0	94.4	77.0	73.4	80.5
Kuwait	2011	585	7.3	9.8	59.2	21.2	2.6	17.1	7.3	9.0	5.3
	2015	493	12.2	15.2	49.6	19.8	3.2	27.5	12.2	15.6	9.0
Lithuania	2011	663	35.3	28.2	34.4	2.0	0.1	63.4	35.3	28.1	41.8
	2015	649	36.9	31.4	29.3	2.2	0.2	68.3	36.9	38.3	35.4
Morocco	2011	1127	5.1	10.3	63.1	17.8	3.7	15.4	5.1	5.6	4.7
	2015	727	9.3	19.0	64.4	4.5	2.8	28.3	9.3	12.2	6.5
Netherlands	2011	464	54.9	30.4	14.2	0.2	0.2	85.3	54.9	56.3	53.3
	2015	651	48.7	29.1	20.0	2.0	0.2	77.8	48.7	48.9	48.5
New Zealand	2011	794	45.6	23.3	29.0	2.0	0.1	68.9	45.6	44.2	47.0
	2015	904	48.5	24.4	21.9	5.0	0.2	72.9	48.5	50.3	46.6
Northern Ireland	2011	516	61.0	26.0	12.2	0.8	0.0	87.0	61.0	63.3	58.7
	2015	452	55.7	23.4	20.4	0.5	0.0	79.1	55.7	57.6	53.9
Oman	2011	1495	14.6	12.6	59.2	11.2	2.4	27.2	14.6	16.2	13.0
	2015	1289	15.3	20.8	56.7	6.2	1.0	36.1	15.3	18.3	12.9
Portugal	2011	574	58.4	22.9	17.7	0.8	0.3	81.3	58.4	61.4	55.7
	2015	685	47.6	28.8	21.9	1.3	0.4	76.4	47.6	49.7	45.7
Qatar	2011	591	17.3	14.1	59.2	8.9	0.5	31.4	17.3	18.2	16.6
	2015	728	23.1	25.1	44.8	5.7	1.4	48.2	23.1	24.0	22.1
Russian Federation	2011	642	49.3	28.0	17.1	5.3	0.3	77.3	49.3	49.2	49.3
	2015	705	61.8	19.1	16.2	2.7	0.2	80.9	61.8	65.9	58.0
Saudi Arabia	2011	674	1.6	28.8	62.1	6.9	0.6	30.4	1.6	1.6	1.5
	2015	618	7.3	13.0	65.4	13.2	1.1	20.3	7.3	7.3	7.3
Serbia	2011	625	44.0	28.9	21.4	3.9	1.7	73.0	44.0	47.0	41.1
	2015	590	47.7	27.8	14.4	9.2	1.0	75.4	47.7	46.5	48.7
Singapore	2011	903	37.9	27.7	34.0	0.2	0.1	65.7	37.9	37.4	38.4
	2015	939	46.2	27.0	26.6	0.2	0.0	73.2	46.2	46.0	46.4
Slovak Republic	2011	795	38.1	29.3	28.1	4.2	0.3	67.4	38.1	36.1	40.4
	2015	818	44.6	25.1	23.2	6.1	1.1	69.7	44.6	42.1	46.7
Slovenia	2011	641	44.2	28.3	23.6	3.5	0.4	72.5	44.2	41.9	46.5
	2015	628	44.3	35.2	16.6	2.5	1.3	79.6	44.3	45.7	43.3
Spain	2011	585	59.3	24.4	13.4	2.6	0.2	83.7	59.3	57.9	60.5
	2015	1108	61.0	21.3	15.0	1.2	1.5	82.3	61.0	56.3	65.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_06 (S041037): Life Science / Reasoning Type: CR 2 Points
Label: Pos. or neg. effect of activity

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	65.6	23.4	9.2	1.4	0.4	89.1	65.6	60.5	69.7
	2015	588	67.6	21.1	8.8	1.3	1.1	88.8	67.6	70.1	65.1
Turkey	2011	1083	27.2	30.5	40.5	1.6	0.2	57.8	27.2	27.4	27.1
	2015	925	39.1	28.8	30.9	1.1	0.0	68.0	39.1	43.0	35.4
United Arab Emirates	2011	2069	18.6	18.6	56.1	6.2	0.5	37.2	18.6	19.5	17.8
	2015	3039	28.1	21.7	45.2	4.6	0.4	49.8	28.1	27.6	28.6
United States	2011	1801	58.2	17.8	21.2	1.7	1.1	76.0	58.2	58.5	57.9
	2015	1448	58.3	18.2	20.0	2.9	0.6	76.5	58.3	58.7	57.9

International Avg (n=40)	2011	30358	41.1	24.7	29.2	4.3	0.7	65.8	41.1	40.8	41.3
	2015	30726	42.8	25.5	27.0	3.8	0.9	68.3	42.8	43.7	42.0

Ontario, Canada	2011	637	58.4	19.7	19.5	1.3	1.0	78.1	58.4	59.0	57.8
	2015	651	59.1	21.6	16.1	2.1	1.2	80.7	59.1	64.3	54.2
Quebec, Canada	2011	615	64.4	23.7	10.8	1.1	0.0	88.1	64.4	64.5	64.3
	2015	403	70.1	20.8	8.9	0.2	0.1	90.9	70.1	70.0	70.1
Norway (4)	2011	442	35.5	28.3	32.6	2.7	0.8	63.8	35.5	39.6	31.6
	2015	599	34.0	33.3	26.6	2.9	3.2	67.3	34.0	35.2	32.7
Abu Dhabi, UAE	2011	587	16.0	14.7	62.6	6.2	0.6	30.6	16.0	16.3	15.6
	2015	716	23.0	18.7	52.3	5.4	0.6	41.7	23.0	23.6	22.5
Dubai, UAE	2011	868	30.3	22.5	42.2	4.3	0.6	52.9	30.3	31.9	28.9
	2015	1069	44.0	22.4	31.5	2.1	0.0	66.4	44.0	42.4	45.4
Florida, US	2011	364	64.9	17.7	13.4	3.5	0.5	82.7	64.9	66.0	63.8
	2015	288	61.3	19.3	18.4	0.7	0.2	80.6	61.3	60.2	62.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_07 (S041119): Physical Science / Applying Type: MC Key: C
Label: Direction of gravity

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	70.6	16.8	4.5	70.6	5.2	2.2	0.6	72.1	69.2
	2015	875	77.5	13.3	2.3	77.5	3.5	2.6	0.8	77.2	77.9
Bahrain	2011	588	73.4	13.1	2.7	73.4	6.2	2.6	2.0	78.9	67.9
	2015	598	68.4	10.6	6.2	68.4	9.7	3.5	1.6	75.4	61.4
Belgium (Flemish)	2011	692	66.8	24.4	5.0	66.8	1.8	1.7	0.3	67.3	66.4
	2015	766	69.5	22.8	3.0	69.5	2.0	2.1	0.6	66.8	72.2
Chile	2011	798	61.9	16.7	6.2	61.9	10.8	1.8	2.6	61.2	62.5
	2015	673	67.0	13.8	5.7	67.0	7.9	2.4	3.2	64.9	68.7
Chinese Taipei	2011	615	87.8	9.2	1.8	87.8	1.0	0.0	0.2	86.6	88.9
	2015	613	88.4	8.1	1.5	88.4	2.0	0.0	0.0	87.3	89.4
Croatia	2011	659	43.0	24.6	15.9	43.0	9.1	7.1	0.3	38.5	47.2
	2015	571	57.1	22.2	10.9	57.1	4.6	4.5	0.7	51.2	62.1
Czech Republic	2011	660	64.7	22.3	3.1	64.7	3.9	5.8	0.1	61.8	67.6
	2015	750	72.1	19.6	2.3	72.1	2.8	2.7	0.5	67.3	76.5
Denmark	2011	566	66.8	22.5	3.8	66.8	2.0	4.5	0.5	63.6	69.9
	2015	526	71.9	18.6	2.1	71.9	1.5	3.6	2.3	69.7	74.2
England	2011	486	73.8	15.5	3.4	73.8	2.9	3.5	0.9	67.6	80.0
	2015	569	82.0	10.3	1.8	82.0	3.9	1.8	0.2	79.5	85.0
Finland	2011	650	82.4	8.9	3.7	82.4	2.8	1.9	0.3	80.1	84.7
	2015	716	81.0	8.8	5.6	81.0	0.9	2.9	0.8	79.6	82.4
Georgia	2011	685	56.5	17.7	8.2	56.5	10.3	4.8	2.5	59.1	54.3
	2015	554	41.3	27.7	9.7	41.3	11.2	5.4	4.6	40.9	41.7
Germany	2011	581	79.2	11.8	3.1	79.2	1.9	3.9	0.0	75.4	83.2
	2015	556	77.2	10.7	4.0	77.2	2.4	5.2	0.5	75.8	78.5
Hong Kong SAR	2011	567	87.6	5.8	1.7	87.6	3.4	1.5	0.0	83.8	90.9
	2015	517	87.3	8.6	1.2	87.3	2.0	0.9	0.0	85.1	89.2
Hungary	2011	741	58.7	27.5	7.4	58.7	3.6	1.9	0.9	53.6	63.3
	2015	715	63.9	22.0	6.8	63.9	2.2	2.7	2.4	63.5	64.3
Iran, Islamic Rep. of	2011	815	78.2	7.6	4.1	78.2	3.6	3.2	3.2	78.9	77.6
	2015	543	77.5	8.6	2.4	77.5	4.6	3.6	3.3	79.2	75.8
Ireland	2011	645	62.8	22.4	7.3	62.8	4.7	2.7	0.1	60.5	65.2
	2015	623	68.9	22.3	3.2	68.9	3.8	1.0	0.9	64.0	73.5
Italy	2011	600	71.0	16.1	5.4	71.0	2.8	4.0	0.6	69.3	72.8
	2015	624	71.1	18.1	4.1	71.1	2.7	3.3	0.6	67.8	74.4
Japan	2011	629	68.0	17.4	8.6	68.0	3.1	2.4	0.4	64.9	71.0
	2015	621	69.6	16.2	9.8	69.6	3.3	1.1	0.0	64.4	75.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_07 (S041119): Physical Science / Applying Type: MC Key: C
Label: Direction of gravity

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	76.1	9.1	4.5	76.1	6.6	1.9	1.9	75.5	76.6
	2015	668	87.2	3.3	5.3	87.2	3.5	0.5	0.3	86.9	87.5
Korea, Rep. of	2011	619	75.4	21.2	2.3	75.4	0.9	0.2	0.0	71.7	79.1
	2015	664	82.5	13.2	2.3	82.5	1.4	0.5	0.1	80.1	84.8
Kuwait	2011	582	58.0	9.5	6.5	58.0	17.2	5.9	2.9	64.8	50.1
	2015	493	49.4	13.9	7.3	49.4	17.8	8.3	3.3	53.4	44.6
Lithuania	2011	663	88.0	5.9	1.4	88.0	3.7	0.7	0.2	88.0	88.1
	2015	649	90.0	4.2	1.8	90.0	2.4	1.4	0.2	89.8	90.3
Morocco	2011	1081	56.0	9.3	17.2	56.0	10.1	3.2	4.1	60.9	51.6
	2015	727	64.3	9.0	7.6	64.3	11.4	4.8	2.9	67.0	61.6
Netherlands	2011	464	70.2	17.3	6.5	70.2	2.8	2.8	0.4	67.8	73.9
	2015	650	64.4	26.0	4.1	64.4	2.3	2.2	1.0	56.4	72.8
New Zealand	2011	794	69.2	17.4	6.7	69.2	4.8	1.8	0.1	68.7	69.7
	2015	904	63.9	22.7	3.5	63.9	4.3	5.2	0.5	59.5	68.3
Northern Ireland	2011	516	66.9	18.9	8.5	66.9	3.2	2.4	0.0	64.7	69.2
	2015	447	67.1	25.4	3.9	67.1	3.6	0.0	0.0	67.7	66.5
Oman	2011	1495	67.2	9.0	5.8	67.2	11.7	3.3	3.0	71.5	62.8
	2015	1307	68.7	9.7	5.8	68.7	12.5	2.4	0.9	71.6	66.2
Portugal	2011	574	63.6	21.6	8.7	63.6	3.6	2.3	0.3	64.8	62.4
	2015	685	63.0	24.9	6.2	63.0	3.1	2.0	0.7	57.9	67.8
Qatar	2011	591	56.1	16.3	9.0	56.1	14.0	3.9	0.7	58.4	54.1
	2015	728	60.8	17.6	6.4	60.8	9.8	3.6	1.9	64.5	57.0
Russian Federation	2011	642	90.7	5.1	1.6	90.7	2.1	0.2	0.3	88.0	93.2
	2015	705	94.7	2.5	1.1	94.7	1.1	0.4	0.2	94.0	95.5
Saudi Arabia	2011	674	76.8	7.1	4.4	76.8	9.8	1.3	0.6	81.5	71.5
	2015	617	66.6	5.8	5.7	66.6	16.9	3.6	1.3	70.1	63.3
Serbia	2011	625	86.8	4.2	2.1	86.8	2.1	2.9	1.8	86.0	87.7
	2015	590	88.1	3.6	1.4	88.1	2.3	3.1	1.6	85.6	90.3
Singapore	2011	902	65.9	22.9	7.3	65.9	3.0	0.8	0.1	59.9	71.9
	2015	939	75.6	16.1	4.2	75.6	3.2	0.8	0.0	73.7	77.2
Slovak Republic	2011	795	79.4	14.6	2.9	79.4	2.1	0.7	0.3	76.7	82.3
	2015	818	84.2	10.5	1.2	84.2	1.6	1.3	1.2	82.1	86.0
Slovenia	2011	639	86.0	4.4	1.7	86.0	6.2	1.1	0.5	82.5	89.5
	2015	628	86.8	3.9	0.9	86.8	4.4	2.5	1.5	86.5	86.9
Spain	2011	585	77.0	13.7	1.6	77.0	2.6	4.5	0.6	74.6	79.2
	2015	1108	75.0	16.7	1.8	75.0	2.4	2.2	1.9	74.4	75.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_07 (S041119): Physical Science / Applying Type: MC Key: C
Label: Direction of gravity

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	53.9	20.5	17.3	53.9	4.9	3.0	0.4	47.0	59.4
	2015	588	63.6	16.9	7.3	63.6	5.5	5.3	1.4	61.1	66.0
Turkey	2011	1083	66.9	19.6	6.5	66.9	6.2	0.7	0.2	67.0	66.8
	2015	925	66.6	22.6	5.5	66.6	4.0	1.0	0.3	67.0	66.2
United Arab Emirates	2011	2069	63.9	15.5	6.5	63.9	10.6	2.3	1.2	66.0	61.6
	2015	3039	67.2	14.4	5.7	67.2	9.3	2.8	0.7	68.1	66.3
United States	2011	1801	70.5	16.9	4.8	70.5	5.0	1.5	1.2	68.6	72.6
	2015	1448	71.2	17.7	2.8	71.2	4.6	2.8	0.9	66.6	76.1

International Avg (n=40)	2011	30306	70.4	15.0	5.7	70.4	5.3	2.6	0.9	69.4	71.4
	2015	30737	72.3	14.6	4.4	72.3	5.0	2.6	1.1	71.1	73.5

Ontario, Canada	2011	637	76.7	12.9	2.5	76.7	3.7	3.0	1.1	74.9	78.6
	2015	651	80.5	11.4	1.5	80.5	2.7	2.6	1.3	78.2	82.8
Quebec, Canada	2011	615	67.8	22.0	4.0	67.8	3.3	2.8	0.0	63.8	72.2
	2015	403	72.5	18.2	3.0	72.5	4.6	1.7	0.1	61.5	81.1
Norway (4)	2011	442	63.4	22.7	6.7	63.4	3.4	2.5	1.4	69.5	57.5
	2015	599	60.5	23.6	5.9	60.5	3.0	3.7	3.4	59.8	61.2
Abu Dhabi, UAE	2011	587	62.7	13.6	7.8	62.7	12.1	1.9	1.9	65.8	59.6
	2015	716	62.9	14.8	7.0	62.9	10.7	3.5	1.2	64.9	60.9
Dubai, UAE	2011	868	62.6	18.9	5.9	62.6	9.0	2.7	0.9	60.8	64.3
	2015	1069	72.7	13.7	5.0	72.7	6.0	2.4	0.1	69.1	75.8
Florida, US	2011	364	70.9	14.7	5.2	70.9	5.2	2.5	1.6	70.4	71.4
	2015	288	78.3	14.9	0.7	78.3	4.4	0.8	1.0	78.5	78.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_08 (S041105): Earth Science / Knowing Type: MC Key: D
Label: Evidence for existence of animals

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	70.3	6.9	14.0	6.4	70.3	1.4	1.0	66.8	73.5
	2015	875	68.0	6.4	12.1	7.6	68.0	4.7	1.3	66.2	70.0
Bahrain	2011	588	46.6	14.5	15.3	20.2	46.6	1.4	2.0	45.9	47.4
	2015	598	42.5	18.2	15.6	19.4	42.5	2.5	1.9	47.4	37.5
Belgium (Flemish)	2011	692	59.8	5.3	13.2	19.6	59.8	1.7	0.5	54.1	65.6
	2015	766	60.3	6.6	13.3	16.6	60.3	2.3	0.9	56.8	63.9
Chile	2011	798	45.2	12.1	18.1	20.4	45.2	1.6	2.7	41.1	48.7
	2015	673	41.7	14.9	19.3	17.8	41.7	2.9	3.4	36.5	46.0
Chinese Taipei	2011	615	85.5	3.6	6.1	4.5	85.5	0.2	0.2	85.5	85.5
	2015	613	82.9	3.6	9.9	3.4	82.9	0.2	0.0	81.9	83.7
Croatia	2011	659	80.9	3.2	7.5	6.4	80.9	1.5	0.6	81.3	80.6
	2015	571	77.6	2.8	10.9	5.7	77.6	2.3	0.7	78.6	76.8
Czech Republic	2011	660	75.3	5.5	12.4	4.7	75.3	2.0	0.1	74.7	76.0
	2015	750	77.2	3.9	13.1	3.4	77.2	1.6	0.8	75.2	78.9
Denmark	2011	566	67.9	5.2	8.4	13.4	67.9	4.0	1.0	67.7	68.2
	2015	526	66.5	7.5	6.5	13.5	66.5	3.2	2.6	62.3	70.7
England	2011	486	71.9	7.4	11.1	6.6	71.9	1.9	1.1	69.4	74.4
	2015	569	75.6	7.7	10.5	5.1	75.6	0.8	0.3	73.3	78.2
Finland	2011	650	78.4	2.1	13.7	4.0	78.4	1.4	0.3	72.3	84.6
	2015	716	74.9	2.1	13.7	5.1	74.9	3.1	1.0	72.2	77.5
Georgia	2011	689	65.1	7.1	10.3	10.2	65.1	4.4	3.0	73.4	57.9
	2015	554	48.2	9.2	19.6	12.9	48.2	5.1	5.0	46.6	49.6
Germany	2011	581	78.2	4.6	7.4	5.7	78.2	3.9	0.3	75.4	81.0
	2015	556	68.9	5.7	11.5	7.7	68.9	5.2	1.0	68.2	69.5
Hong Kong SAR	2011	567	84.5	4.9	4.8	4.3	84.5	1.2	0.2	82.2	86.5
	2015	517	85.8	3.0	5.9	4.8	85.8	0.6	0.0	85.2	86.4
Hungary	2011	741	73.9	5.0	12.6	5.5	73.9	1.9	1.1	74.2	73.7
	2015	715	72.0	4.6	11.7	4.7	72.0	4.2	2.9	70.9	73.1
Iran, Islamic Rep. of	2011	815	37.4	9.3	39.6	7.3	37.4	2.8	3.6	37.2	37.7
	2015	544	34.0	12.6	34.9	11.3	34.0	3.3	3.8	37.7	30.4
Ireland	2011	645	69.2	6.9	16.7	6.2	69.2	0.9	0.1	71.2	67.0
	2015	623	71.1	8.0	13.7	5.9	71.1	0.2	1.0	65.4	76.6
Italy	2011	600	56.2	4.9	18.3	18.0	56.2	2.0	0.6	56.3	56.2
	2015	624	58.3	4.9	15.3	17.6	58.3	3.3	0.6	56.3	60.3
Japan	2011	629	67.8	6.2	16.8	8.1	67.8	0.5	0.6	67.8	67.8
	2015	621	65.7	6.4	17.6	9.7	65.7	0.6	0.0	60.9	70.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_08 (S041105): Earth Science / Knowing Type: MC Key: D
Label: Evidence for existence of animals

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	621	47.1	10.2	24.4	13.6	47.1	2.7	1.9	44.4	50.0
	2015	668	54.5	5.8	31.5	7.3	54.5	0.4	0.4	51.4	57.6
Korea, Rep. of	2011	619	84.1	4.2	7.2	4.2	84.1	0.3	0.0	83.0	85.1
	2015	664	66.5	5.2	18.0	9.9	66.5	0.2	0.3	63.7	69.1
Kuwait	2011	578	37.3	10.9	15.8	25.8	37.3	7.1	3.1	40.8	33.3
	2015	492	29.3	15.4	20.1	20.5	29.3	11.2	3.5	29.0	30.1
Lithuania	2011	663	60.8	6.2	22.2	5.9	60.8	4.7	0.2	60.1	61.5
	2015	649	56.4	7.7	25.3	6.5	56.4	3.6	0.5	57.0	55.7
Morocco	2011	1071	24.7	18.7	21.4	26.9	24.7	3.8	4.6	26.0	23.4
	2015	729	29.4	16.9	21.8	25.3	29.4	3.2	3.5	29.7	29.0
Netherlands	2011	464	68.3	4.1	7.4	18.2	68.3	1.1	0.9	65.7	71.4
	2015	650	66.1	3.3	8.7	17.7	66.1	2.9	1.3	58.7	74.0
New Zealand	2011	794	69.1	10.5	13.0	6.4	69.1	1.0	0.1	68.9	69.2
	2015	902	68.3	11.1	10.8	5.0	68.3	4.2	0.6	68.2	68.4
Northern Ireland	2011	516	72.4	4.3	14.5	7.7	72.4	0.9	0.3	72.0	72.8
	2015	450	76.0	7.7	10.6	5.3	76.0	0.4	0.0	75.4	76.5
Oman	2011	1495	40.8	18.1	20.3	14.1	40.8	3.5	3.3	43.8	37.8
	2015	1309	48.5	15.2	16.2	15.6	48.5	3.4	1.0	48.0	49.0
Portugal	2011	574	53.5	5.7	25.4	12.5	53.5	2.7	0.3	55.1	52.0
	2015	685	45.1	6.4	27.1	17.5	45.1	2.8	1.0	45.3	44.9
Qatar	2011	591	39.7	17.0	19.4	20.6	39.7	2.6	0.7	39.2	40.2
	2015	728	49.5	13.8	15.5	15.8	49.5	3.1	2.3	49.9	49.2
Russian Federation	2011	642	72.4	1.7	21.2	2.9	72.4	1.5	0.3	71.2	73.5
	2015	705	72.4	2.9	17.1	3.0	72.4	4.4	0.3	66.3	78.0
Saudi Arabia	2011	674	36.5	18.2	21.9	20.8	36.5	1.9	0.6	35.2	38.1
	2015	617	38.4	20.2	17.4	18.9	38.4	3.7	1.3	43.7	33.4
Serbia	2011	625	71.9	3.8	13.2	7.2	71.9	2.0	1.9	68.9	74.9
	2015	590	74.7	2.7	11.1	7.7	74.7	2.1	1.8	68.2	80.5
Singapore	2011	903	71.2	7.1	10.2	11.1	71.2	0.3	0.1	67.2	75.3
	2015	939	74.2	5.6	10.7	9.3	74.2	0.2	0.1	73.0	75.2
Slovak Republic	2011	795	69.0	7.3	14.5	7.0	69.0	1.9	0.3	67.4	70.8
	2015	818	59.5	9.6	18.9	8.0	59.5	2.7	1.3	56.3	62.2
Slovenia	2011	635	69.0	7.1	9.1	11.4	69.0	2.7	0.6	65.2	72.7
	2015	628	70.8	4.8	11.4	7.8	70.8	3.0	2.2	70.0	71.4
Spain	2011	585	47.7	10.4	16.7	19.8	47.7	4.7	0.6	41.0	53.9
	2015	1108	59.0	7.5	15.5	12.5	59.0	3.3	2.2	57.3	60.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_08 (S041105): Earth Science / Knowing Type: MC Key: D
Label: Evidence for existence of animals

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	71.0	6.7	11.5	8.9	71.0	1.4	0.5	66.5	74.6
	2015	588	65.9	8.0	13.3	8.7	65.9	2.7	1.4	63.1	68.5
Turkey	2011	1083	46.4	14.6	18.8	18.0	46.4	2.0	0.2	45.6	47.1
	2015	925	53.0	11.8	20.5	12.7	53.0	1.2	0.7	52.0	54.1
United Arab Emirates	2011	2069	45.3	15.8	13.8	21.6	45.3	2.1	1.4	45.6	45.1
	2015	3039	52.1	14.9	14.3	15.9	52.1	2.1	0.8	52.2	51.9
United States	2011	1801	77.5	6.3	6.5	6.9	77.5	1.4	1.4	75.0	80.1
	2015	1448	75.8	7.6	7.1	6.9	75.8	1.7	0.9	74.6	77.2

International Avg (n=40)	2011	30292	62.2	8.1	14.9	11.6	62.2	2.2	1.1	61.1	63.4
	2015	30742	61.4	8.3	15.4	10.8	61.4	2.7	1.4	59.9	62.9

Ontario, Canada	2011	637	71.9	9.1	8.5	7.8	71.9	1.6	1.1	71.8	71.9
	2015	650	73.2	10.8	6.6	6.6	73.2	1.3	1.5	72.6	74.0
Quebec, Canada	2011	615	68.3	6.3	10.8	12.7	68.3	1.7	0.1	68.9	67.7
	2015	403	77.7	5.1	8.0	8.3	77.7	0.5	0.4	77.0	78.2
Norway (4)	2011	442	77.4	8.8	6.5	4.2	77.4	1.4	1.5	80.1	74.9
	2015	599	74.6	7.4	7.2	4.1	74.6	2.6	4.1	74.2	75.0
Abu Dhabi, UAE	2011	587	42.3	17.7	15.2	20.9	42.3	1.8	2.1	41.9	42.7
	2015	716	45.3	18.6	18.0	14.3	45.3	2.6	1.4	45.7	44.9
Dubai, UAE	2011	868	56.5	13.4	13.3	13.9	56.5	1.9	0.9	54.7	58.2
	2015	1069	65.2	10.6	10.8	11.8	65.2	1.5	0.1	65.6	64.8
Florida, US	2011	364	73.2	6.1	7.5	9.5	73.2	1.6	2.0	72.0	74.6
	2015	288	79.2	5.1	7.7	5.5	79.2	1.5	1.0	77.7	80.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S01_10Z (S041149Z): Earth Science / Reasoning Type: CR 2 Points
Label: Water glass cotton get wet (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	16.2	14.1	61.8	6.8	1.2	30.2	16.2	16.1	16.2
	2015	876	12.5	10.5	70.4	5.0	1.6	23.0	12.5	9.9	15.5
Bahrain	2011	588	7.7	9.6	69.6	10.8	2.4	17.2	7.7	6.5	8.8
	2015	598	3.8	5.7	78.9	9.2	2.4	9.5	3.8	3.2	4.4
Belgium (Flemish)	2011	692	11.9	7.1	75.4	5.0	0.5	19.0	11.9	9.0	14.8
	2015	766	15.0	6.1	71.5	6.1	1.3	21.1	15.0	12.2	18.0
Chile	2011	798	4.7	5.2	75.1	11.4	3.6	9.9	4.7	2.4	6.7
	2015	674	4.3	3.3	71.3	17.0	4.1	7.6	4.3	3.9	4.5
Chinese Taipei	2011	615	42.3	16.7	35.1	5.8	0.2	59.0	42.3	40.2	44.0
	2015	614	37.4	22.2	36.1	4.2	0.2	59.5	37.4	35.5	39.0
Croatia	2011	659	15.6	9.4	65.0	9.0	1.0	25.0	15.6	14.1	16.9
	2015	571	30.6	9.3	52.7	6.4	1.0	39.9	30.6	32.8	28.8
Czech Republic	2011	660	23.8	12.4	52.7	11.1	0.1	36.1	23.8	20.1	27.3
	2015	750	22.5	11.5	54.8	10.0	1.1	34.0	22.5	17.6	27.1
Denmark	2011	566	19.0	13.7	56.1	9.7	1.5	32.7	19.0	15.8	22.1
	2015	528	14.3	10.4	61.5	9.8	4.0	24.7	14.3	12.1	16.6
England	2011	486	11.2	10.0	73.9	3.8	1.1	21.2	11.2	7.3	15.1
	2015	569	9.6	5.7	80.8	3.6	0.5	15.2	9.6	9.0	10.2
Finland	2011	650	30.3	15.2	50.2	4.0	0.3	45.5	30.3	24.0	36.7
	2015	718	28.8	13.7	48.7	7.5	1.3	42.5	28.8	32.6	25.3
Georgia	2011	680	6.8	3.3	65.1	20.9	3.9	10.1	6.8	6.0	7.5
	2015	555	6.7	5.3	61.1	21.6	5.4	12.0	6.7	7.1	6.4
Germany	2011	581	25.0	11.5	51.9	11.0	0.6	36.5	25.0	18.7	31.4
	2015	556	24.6	14.8	48.1	11.1	1.3	39.5	24.6	22.3	27.2
Hong Kong SAR	2011	567	27.6	13.0	48.7	10.5	0.2	40.6	27.6	29.5	25.9
	2015	517	36.9	10.5	48.3	4.3	0.0	47.4	36.9	35.9	37.7
Hungary	2011	741	26.3	12.9	53.4	6.2	1.3	39.2	26.3	24.7	27.8
	2015	715	20.2	11.3	58.3	6.4	3.8	31.5	20.2	18.1	22.3
Iran, Islamic Rep. of	2011	815	9.5	3.9	69.1	13.3	4.2	13.4	9.5	6.1	13.1
	2015	544	2.3	2.8	75.6	14.1	5.2	5.1	2.3	3.3	1.3
Ireland	2011	645	12.9	8.5	72.7	5.8	0.1	21.5	12.9	14.9	10.9
	2015	623	9.3	6.9	79.4	3.0	1.5	16.2	9.3	7.0	11.5
Italy	2011	600	23.8	11.2	52.9	11.5	0.6	35.0	23.8	22.6	24.9
	2015	622	18.2	11.9	53.6	14.9	1.4	30.1	18.2	15.6	20.8
Japan	2011	629	56.8	14.1	27.2	1.3	0.6	70.9	56.8	56.1	57.6
	2015	621	55.3	13.6	29.3	1.8	0.1	68.8	55.3	52.2	58.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_10Z (S041149Z): Earth Science / Reasoning Type: CR 2 Points
Label: Water glass cotton get wet (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	27.3	11.5	41.9	16.6	2.7	38.8	27.3	24.5	30.2
	2015	668	37.2	16.8	38.8	6.5	0.6	54.1	37.2	36.7	37.8
Korea, Rep. of	2011	619	50.8	15.0	33.4	0.8	0.0	65.8	50.8	46.9	54.6
	2015	664	39.4	13.3	44.8	2.3	0.3	52.6	39.4	38.7	40.0
Kuwait	2011	586	1.4	4.9	62.6	27.2	3.9	6.3	1.4	1.6	1.2
	2015	493	0.7	4.7	51.2	38.9	4.5	5.4	0.7	0.6	0.8
Lithuania	2011	663	15.9	7.0	70.0	6.9	0.2	22.9	15.9	11.7	19.7
	2015	649	17.0	6.8	66.2	9.5	0.5	23.8	17.0	14.9	19.2
Morocco	2011	1127	5.1	6.5	45.1	36.6	6.8	11.6	5.1	5.2	5.0
	2015	729	13.5	6.9	59.4	16.5	3.8	20.4	13.5	15.7	11.3
Netherlands	2011	464	14.4	9.7	70.6	4.3	0.9	24.1	14.4	13.2	16.0
	2015	651	11.0	6.7	75.5	4.8	1.9	17.7	11.0	7.4	14.7
New Zealand	2011	794	13.7	9.2	71.6	5.0	0.4	23.0	13.7	9.8	17.7
	2015	903	12.1	7.8	73.2	5.9	0.9	19.9	12.1	10.7	13.6
Northern Ireland	2011	516	9.1	8.2	77.4	5.1	0.3	17.2	9.1	7.1	11.0
	2015	452	8.9	4.8	81.8	4.5	0.0	13.7	8.9	7.1	10.5
Oman	2011	1495	4.5	4.1	65.5	22.3	3.7	8.6	4.5	5.5	3.5
	2015	1299	5.3	9.6	69.1	14.6	1.3	14.9	5.3	6.1	4.7
Portugal	2011	574	13.4	8.1	71.2	6.9	0.4	21.5	13.4	10.7	15.8
	2015	685	8.3	3.8	79.4	7.0	1.5	12.1	8.3	7.8	8.7
Qatar	2011	591	5.6	6.2	72.3	14.7	1.1	11.9	5.6	6.3	5.1
	2015	728	6.4	9.0	70.2	11.4	3.0	15.4	6.4	5.4	7.4
Russian Federation	2011	642	34.3	10.5	46.1	8.7	0.5	44.8	34.3	32.9	35.6
	2015	705	38.2	12.9	42.6	5.7	0.5	51.1	38.2	36.9	39.4
Saudi Arabia	2011	673	5.1	3.9	79.9	9.6	1.4	9.0	5.1	3.8	6.6
	2015	618	6.1	6.7	64.6	19.9	2.7	12.8	6.1	7.0	5.3
Serbia	2011	625	20.4	9.0	60.1	8.0	2.5	29.4	20.4	18.5	22.4
	2015	590	19.7	12.7	55.1	9.9	2.6	32.4	19.7	18.2	21.0
Singapore	2011	903	72.0	14.0	13.0	1.0	0.1	86.0	72.0	70.1	73.9
	2015	939	75.5	10.3	13.3	0.8	0.1	85.8	75.5	78.0	73.3
Slovak Republic	2011	795	20.8	14.0	55.7	9.2	0.3	34.9	20.8	17.8	24.1
	2015	818	14.7	11.6	60.9	11.5	1.4	26.2	14.7	11.9	17.1
Slovenia	2011	641	17.6	11.8	61.2	8.3	1.0	29.4	17.6	12.6	22.6
	2015	629	22.4	10.2	56.9	7.5	3.0	32.6	22.4	15.6	27.7
Spain	2011	585	15.8	6.4	67.7	9.3	0.8	22.2	15.8	12.8	18.5
	2015	1109	9.1	7.0	75.2	5.5	3.2	16.1	9.1	9.4	8.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_10Z (S041149Z): Earth Science / Reasoning Type: CR 2 Points
Label: Water glass cotton get wet (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	28.9	14.0	49.1	7.2	0.7	43.0	28.9	25.7	31.5
	2015	590	28.6	15.4	47.4	6.8	1.8	44.1	28.6	26.4	30.7
Turkey	2011	1083	13.6	10.1	69.1	6.4	0.9	23.6	13.6	11.4	15.4
	2015	925	20.0	8.6	64.3	6.5	0.7	28.6	20.0	19.7	20.2
United Arab Emirates	2011	2069	5.7	5.7	70.9	16.1	1.6	11.4	5.7	5.3	6.2
	2015	3038	8.2	7.9	69.8	13.0	1.1	16.0	8.2	7.5	8.8
United States	2011	1801	16.0	8.9	71.4	2.1	1.6	25.0	16.0	14.4	17.8
	2015	1448	12.7	7.3	74.2	4.7	1.1	20.0	12.7	11.6	13.9

International Avg (n=40)	2011	30353	19.6	9.8	59.5	9.7	1.4	29.3	19.6	17.5	21.6
	2015	30747	19.2	9.4	60.4	9.2	1.8	28.6	19.2	18.1	20.3

Ontario, Canada	2011	637	12.8	9.3	73.4	2.9	1.5	22.1	12.8	11.0	14.7
	2015	652	10.6	8.3	74.4	5.0	1.8	18.9	10.6	11.5	9.7
Quebec, Canada	2011	615	14.2	10.1	69.9	5.6	0.1	24.4	14.2	10.4	18.6
	2015	404	14.4	15.6	65.0	4.5	0.5	30.0	14.4	11.8	16.5
Norway (4)	2011	442	7.1	8.7	69.4	11.7	3.2	15.8	7.1	5.5	8.6
	2015	599	6.6	7.5	69.3	10.5	6.1	14.1	6.6	5.6	7.6
Abu Dhabi, UAE	2011	587	5.4	7.2	71.7	13.4	2.3	12.6	5.4	5.3	5.5
	2015	716	5.4	6.1	72.6	13.9	1.9	11.5	5.4	5.0	5.8
Dubai, UAE	2011	868	8.7	6.8	69.4	14.1	1.1	15.5	8.7	5.8	11.4
	2015	1070	13.7	12.0	67.4	6.7	0.2	25.7	13.7	13.3	13.9
Florida, US	2011	364	12.4	8.5	75.1	1.2	2.7	21.0	12.4	9.6	15.6
	2015	288	14.1	4.8	77.1	2.5	1.6	18.9	14.1	15.1	13.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_l1 (S041032): Life Science / Knowing Type: CR 1 Point
Label: Staying in sun with no protection

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	43.6	47.4	2.2	1.7	3.3	1.8	93.1	95.3	91.1
	2015	875	33.5	55.1	3.8	3.8	1.8	1.9	92.5	93.6	91.2
Bahrain	2011	588	3.8	43.2	4.2	28.8	15.1	4.9	51.2	58.3	44.3
	2015	598	2.6	50.3	6.5	28.0	8.7	4.0	59.4	68.9	49.8
Belgium (Flemish)	2011	692	2.7	89.0	2.5	2.8	1.6	1.3	94.3	95.9	92.7
	2015	766	4.3	81.0	2.5	6.7	3.5	2.0	87.8	90.7	84.8
Chile	2011	798	12.3	70.6	2.8	2.9	6.2	5.2	85.7	87.3	84.3
	2015	673	7.2	71.9	2.8	4.8	6.2	7.0	81.9	83.8	80.3
Chinese Taipei	2011	615	4.0	76.7	8.9	6.2	4.0	0.2	89.5	90.8	88.4
	2015	613	7.1	70.1	9.9	9.3	3.6	0.0	87.1	91.4	83.3
Croatia	2011	659	12.6	74.3	5.5	4.7	1.7	1.2	92.4	93.4	91.4
	2015	571	5.8	80.6	6.0	3.3	2.6	1.7	92.4	95.3	90.1
Czech Republic	2011	660	6.8	81.2	1.9	5.7	2.8	1.5	90.0	91.7	88.3
	2015	750	1.2	82.0	4.8	5.8	3.4	2.8	88.0	89.5	86.7
Denmark	2011	566	4.5	85.2	2.3	4.2	1.8	2.1	91.9	94.3	89.6
	2015	526	5.4	79.2	1.2	4.9	2.1	7.1	85.8	85.5	86.1
England	2011	486	10.6	76.7	4.7	3.5	1.8	2.8	92.0	92.1	92.0
	2015	569	4.4	86.7	3.4	2.5	1.7	1.3	94.4	94.9	94.0
Finland	2011	650	2.0	93.1	1.5	2.0	0.8	0.7	96.5	96.8	96.3
	2015	716	2.5	86.6	3.2	3.9	1.2	2.7	92.3	94.8	90.0
Georgia	2011	689	0.6	75.0	5.5	6.1	7.0	5.9	81.1	86.6	76.3
	2015	554	0.2	71.2	4.0	5.0	11.1	8.6	75.4	78.1	73.0
Germany	2011	581	3.7	84.8	3.5	4.5	2.2	1.3	92.0	93.0	91.0
	2015	556	2.0	83.0	4.9	4.2	2.8	3.1	89.8	91.1	88.4
Hong Kong SAR	2011	567	12.0	50.8	4.0	27.7	5.1	0.4	66.8	67.4	66.3
	2015	517	10.6	62.6	4.2	18.7	3.8	0.0	77.4	80.4	74.7
Hungary	2011	741	7.4	80.5	2.6	4.2	2.6	2.7	90.6	91.8	89.4
	2015	715	3.9	79.6	2.9	4.9	3.3	5.4	86.4	90.5	82.1
Iran, Islamic Rep. of	2011	815	1.4	62.5	7.1	12.6	9.6	6.9	70.9	71.7	70.1
	2015	544	2.4	61.1	4.9	17.0	6.7	7.9	68.4	69.6	67.1
Ireland	2011	645	5.5	80.4	3.2	6.2	4.1	0.6	89.1	90.0	88.1
	2015	623	11.4	80.6	2.1	1.7	2.0	2.2	94.1	93.4	94.6
Italy	2011	600	1.3	80.1	7.6	4.5	5.1	1.4	89.1	90.4	87.8
	2015	622	0.3	79.5	6.7	5.5	5.7	2.3	86.5	88.8	84.1
Japan	2011	629	3.5	68.5	9.6	14.6	2.7	1.1	81.6	83.0	80.2
	2015	621	1.3	82.0	6.9	6.8	2.5	0.5	90.2	91.8	88.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_11 (S041032): Life Science / Knowing Type: CR 1 Point
Label: Staying in sun with no protection

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	16.6	46.1	10.6	10.5	11.1	5.0	73.3	72.6	74.1
	2015	668	8.1	73.9	1.2	11.1	4.0	1.8	83.2	84.8	81.6
Korea, Rep. of	2011	619	3.2	62.1	30.4	3.0	1.2	0.0	95.8	96.3	95.2
	2015	664	3.5	58.4	32.5	4.4	0.4	0.9	94.4	97.0	91.9
Kuwait	2011	586	0.9	16.9	2.3	32.4	40.2	7.3	20.1	24.0	15.5
	2015	490	1.1	17.8	7.5	25.1	39.6	8.9	26.4	30.0	23.0
Lithuania	2011	663	3.0	61.2	16.6	16.2	2.7	0.3	80.8	83.1	78.8
	2015	649	2.0	70.9	15.0	6.7	4.0	1.5	87.9	90.5	85.2
Morocco	2011	1125	0.7	12.1	1.4	28.3	47.1	10.4	14.1	18.3	10.5
	2015	729	0.5	26.9	0.9	38.0	26.3	7.4	28.3	34.7	22.1
Netherlands	2011	464	5.9	83.6	2.4	5.7	1.0	1.4	91.9	94.2	89.7
	2015	650	4.1	84.4	2.0	4.2	2.4	2.8	90.6	92.1	89.0
New Zealand	2011	794	18.6	70.5	2.0	3.6	3.7	1.5	91.2	94.0	88.3
	2015	902	18.1	71.1	2.7	3.3	2.2	2.5	91.9	95.5	88.4
Northern Ireland	2011	516	13.7	77.4	2.7	4.6	1.4	0.4	93.7	95.4	91.9
	2015	452	10.1	81.6	4.3	1.7	1.6	0.6	96.0	96.9	95.3
Oman	2011	1495	1.3	28.5	11.9	30.6	21.0	6.7	41.7	47.9	35.5
	2015	1310	0.9	31.3	10.6	38.1	15.8	3.4	42.7	48.9	37.6
Portugal	2011	574	10.2	79.4	1.9	2.4	3.8	2.3	91.6	91.2	91.9
	2015	685	11.9	74.6	3.2	2.6	2.9	4.7	89.8	87.9	91.5
Qatar	2011	591	1.8	33.9	7.2	41.1	13.8	2.2	42.9	45.5	40.8
	2015	728	8.0	39.2	7.4	29.9	10.4	5.1	54.6	60.0	49.1
Russian Federation	2011	642	0.4	82.2	7.5	5.1	3.4	1.4	90.1	91.4	88.8
	2015	705	0.9	81.3	11.4	2.8	2.5	1.2	93.6	94.1	93.1
Saudi Arabia	2011	672	0.5	42.8	5.8	35.8	11.2	4.0	49.1	55.6	41.8
	2015	618	10.9	15.6	1.7	43.1	24.2	4.6	28.2	30.4	26.1
Serbia	2011	625	2.3	73.4	12.5	2.9	3.6	5.3	88.2	89.3	87.2
	2015	590	3.3	68.7	9.8	5.7	6.4	6.0	81.9	84.3	79.7
Singapore	2011	903	6.0	82.8	5.1	5.3	0.7	0.1	93.9	95.6	92.1
	2015	939	8.6	81.2	5.5	3.3	1.1	0.3	95.4	96.9	94.0
Slovak Republic	2011	795	2.4	77.1	4.4	11.2	3.4	1.5	83.9	85.9	81.8
	2015	818	1.8	75.1	7.2	8.0	5.3	2.5	84.1	86.3	82.3
Slovenia	2011	641	3.6	81.0	5.0	4.7	4.4	1.3	89.5	93.1	85.9
	2015	628	6.9	78.3	4.7	3.5	3.0	3.6	89.9	90.2	89.6
Spain	2011	585	3.3	81.1	4.5	5.9	3.4	1.7	89.0	88.0	89.8
	2015	1108	2.7	81.5	2.4	5.5	3.0	4.9	86.6	89.2	84.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_11 (S041032): Life Science / Knowing Type: CR 1 Point
Label: Staying in sun with no protection

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	2.7	78.7	5.7	7.7	3.1	2.0	87.1	89.2	85.5
	2015	588	6.6	75.1	5.5	7.3	2.4	3.1	87.2	88.1	86.2
Turkey	2011	1083	2.7	62.8	5.8	19.0	7.4	2.3	71.3	77.0	66.4
	2015	925	2.4	61.9	9.5	18.4	6.2	1.6	73.8	76.1	71.5
United Arab Emirates	2011	2069	3.8	46.9	8.0	23.2	14.5	3.5	58.7	62.9	54.5
	2015	3037	3.9	52.5	6.4	20.6	14.0	2.5	62.9	66.1	60.1
United States	2011	1801	8.3	79.9	3.8	3.3	2.2	2.5	92.0	93.2	90.7
	2015	1448	7.6	79.0	3.7	4.8	2.6	2.2	90.4	92.3	88.3

International Avg (n=40)	2011	30359	6.3	67.0	5.9	11.1	7.0	2.6	79.2	81.3	77.1
	2015	30740	5.8	68.1	5.9	10.6	6.3	3.3	79.7	82.1	77.5

Ontario, Canada	2011	637	7.0	77.6	5.8	4.8	2.4	2.5	90.3	90.8	89.9
	2015	651	8.7	77.3	4.1	2.7	2.4	4.7	90.2	91.8	88.5
Quebec, Canada	2011	615	9.2	80.0	3.0	3.1	2.7	2.1	92.1	94.9	89.0
	2015	403	4.5	84.7	3.4	2.9	2.7	1.8	92.6	92.3	92.8
Norway (4)	2011	442	1.9	83.2	2.1	5.4	2.9	4.6	87.1	91.9	82.6
	2015	599	7.7	68.1	2.4	8.8	4.1	8.9	78.2	79.4	76.9
Abu Dhabi, UAE	2011	587	3.6	42.4	8.8	26.8	14.0	4.4	54.8	60.1	49.6
	2015	714	2.6	49.1	6.1	23.8	14.8	3.6	57.8	56.8	58.7
Dubai, UAE	2011	868	5.4	58.4	8.1	14.6	11.2	2.2	72.0	76.4	67.9
	2015	1069	7.2	65.5	5.4	14.3	6.1	1.5	78.1	82.2	74.6
Florida, US	2011	364	16.0	69.8	3.5	4.5	1.7	4.5	89.4	91.5	86.9
	2015	288	12.7	74.6	5.0	5.1	1.1	1.6	92.3	89.6	94.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_12 (S041068): Physical Science / Reasoning Type: CR 1 Point
Label: Source of energy for electricity

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	33.3	5.1	46.8	11.9	2.8	38.4	39.0	37.9
	2015	875	38.8	5.0	46.7	7.0	2.4	43.8	42.8	45.1
Bahrain	2011	588	20.7	4.9	54.0	14.2	6.2	25.6	22.5	28.6
	2015	598	24.4	4.2	53.6	12.8	5.0	28.6	31.6	25.6
Belgium (Flemish)	2011	692	30.9	18.3	44.2	5.3	1.4	49.2	44.5	53.9
	2015	766	29.2	12.1	43.1	12.8	2.7	41.3	39.8	42.9
Chile	2011	798	27.3	3.7	41.8	21.0	6.2	30.9	25.9	35.4
	2015	673	30.7	5.6	36.4	19.6	7.7	36.3	33.3	38.8
Chinese Taipei	2011	615	57.8	11.8	22.2	7.9	0.4	69.6	67.2	71.6
	2015	613	59.2	6.4	28.4	5.8	0.2	65.6	65.0	66.1
Croatia	2011	659	28.1	6.8	39.3	24.3	1.5	34.9	28.6	40.7
	2015	571	43.6	11.4	28.1	14.2	2.8	55.0	57.2	53.1
Czech Republic	2011	660	32.9	9.1	41.1	15.3	1.7	42.0	33.1	50.6
	2015	750	53.1	7.1	22.2	14.1	3.5	60.2	55.1	64.9
Denmark	2011	566	24.3	13.2	44.3	15.7	2.4	37.5	31.9	43.1
	2015	526	28.9	7.6	38.9	15.9	8.7	36.5	26.7	46.2
England	2011	486	24.4	6.7	51.6	13.5	3.9	31.0	30.0	32.0
	2015	569	35.7	10.2	42.2	10.1	1.9	45.8	42.4	49.8
Finland	2011	650	57.5	9.6	23.1	8.8	0.9	67.1	58.5	75.8
	2015	716	53.8	12.6	19.2	11.6	2.8	66.4	62.5	70.1
Georgia	2011	689	21.6	1.6	31.8	38.0	6.9	23.2	23.2	23.2
	2015	554	15.3	1.4	32.7	40.0	10.5	16.8	20.6	13.4
Germany	2011	581	44.8	14.6	24.2	14.4	2.0	59.3	52.2	66.7
	2015	556	42.9	13.3	25.1	14.7	4.0	56.2	52.2	60.7
Hong Kong SAR	2011	567	59.8	3.1	29.5	7.1	0.5	62.9	60.3	65.2
	2015	517	61.6	3.6	32.2	2.6	0.0	65.2	61.9	68.2
Hungary	2011	741	33.6	8.1	33.2	22.2	2.9	41.8	36.5	46.5
	2015	715	27.2	9.3	35.6	20.7	7.2	36.5	31.6	41.5
Iran, Islamic Rep. of	2011	815	36.9	7.8	28.7	17.4	9.2	44.8	42.2	47.4
	2015	544	24.3	0.4	44.1	23.1	8.1	24.7	18.0	31.4
Ireland	2011	645	42.6	9.1	35.9	10.4	1.9	51.8	53.6	49.8
	2015	623	43.7	7.5	37.3	8.1	3.3	51.3	50.4	52.1
Italy	2011	600	47.0	8.6	24.6	18.5	1.4	55.5	52.9	58.1
	2015	623	46.9	5.3	27.3	17.6	2.9	52.2	49.5	54.9
Japan	2011	629	29.6	6.0	53.6	9.8	1.1	35.5	33.2	37.8
	2015	621	41.2	9.1	38.6	10.4	0.7	50.3	50.7	49.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_12 (S041068): Physical Science / Reasoning Type: CR 1 Point
Label: Source of energy for electricity

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	621	31.6	4.9	34.3	23.5	5.7	36.6	31.2	42.1
	2015	668	60.1	1.6	25.9	10.0	2.4	61.7	61.8	61.7
Korea, Rep. of	2011	619	42.3	7.8	40.7	9.2	0.0	50.1	45.8	54.4
	2015	664	37.3	3.4	52.6	5.8	0.9	40.7	32.3	48.7
Kuwait	2011	584	6.4	2.4	43.0	38.0	10.3	8.8	9.9	7.5
	2015	490	8.9	2.3	33.3	44.1	11.3	11.3	9.7	13.1
Lithuania	2011	663	43.2	5.2	33.4	17.3	0.8	48.4	43.5	53.0
	2015	649	44.8	7.6	27.1	19.1	1.5	52.3	44.4	60.5
Morocco	2011	1125	4.8	3.3	29.5	50.2	12.1	8.1	8.2	8.1
	2015	729	13.7	1.5	53.0	21.1	10.8	15.1	17.3	13.1
Netherlands	2011	464	36.3	16.1	40.4	5.6	1.6	52.5	46.2	59.8
	2015	651	38.8	9.6	41.4	5.8	4.4	48.4	44.7	52.3
New Zealand	2011	794	38.2	7.9	43.6	7.7	2.6	46.1	42.3	49.9
	2015	902	39.0	8.1	42.2	7.9	2.7	47.2	45.7	48.7
Northern Ireland	2011	516	39.6	8.0	43.7	7.9	0.9	47.6	44.8	50.4
	2015	452	34.2	10.6	46.6	7.6	1.1	44.8	40.9	48.3
Oman	2011	1495	21.1	9.5	33.9	28.0	7.6	30.6	34.0	27.2
	2015	1311	33.0	7.4	35.1	20.1	4.4	40.3	45.0	36.5
Portugal	2011	574	40.8	12.2	29.9	14.2	3.0	52.9	50.1	55.5
	2015	685	38.6	11.2	31.8	12.4	6.0	49.8	46.4	53.0
Qatar	2011	591	18.8	2.5	55.8	19.3	3.6	21.3	21.0	21.6
	2015	728	21.9	3.0	53.1	15.9	6.0	24.9	26.8	22.9
Russian Federation	2011	642	41.6	2.6	36.1	18.0	1.7	44.2	38.2	49.8
	2015	705	48.8	6.4	33.3	10.3	1.3	55.2	55.9	54.4
Saudi Arabia	2011	672	21.7	5.3	53.7	14.7	4.6	27.1	28.3	25.6
	2015	618	20.0	0.5	42.2	31.1	6.1	20.5	25.6	15.6
Serbia	2011	625	55.9	2.5	17.7	17.7	6.3	58.4	54.7	62.0
	2015	590	48.5	3.4	22.1	19.1	7.0	51.9	48.3	55.1
Singapore	2011	903	54.9	8.0	35.0	1.8	0.2	63.0	65.9	60.1
	2015	939	57.4	9.6	30.7	1.6	0.6	67.0	67.9	66.2
Slovak Republic	2011	795	48.1	7.2	24.2	18.9	1.7	55.3	51.0	59.9
	2015	818	49.4	5.5	20.7	21.6	2.9	54.9	46.3	62.4
Slovenia	2011	641	33.8	11.9	25.9	26.4	2.0	45.7	40.8	50.7
	2015	628	45.2	12.4	21.1	17.4	3.9	57.6	49.6	63.9
Spain	2011	585	34.2	4.3	41.7	16.9	2.9	38.5	34.6	42.0
	2015	1108	35.7	6.9	36.5	14.4	6.6	42.6	38.4	46.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_12 (S041068): Physical Science / Reasoning Type: CR 1 Point
Label: Source of energy for electricity

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	39.1	10.8	25.6	21.3	3.3	49.9	46.0	52.9
	2015	587	47.5	8.5	25.5	14.0	4.4	56.0	53.7	58.2
Turkey	2011	1083	33.6	7.8	39.7	15.9	3.1	41.3	37.9	44.3
	2015	925	31.9	8.8	44.5	11.7	3.1	40.7	39.3	42.1
United Arab Emirates	2011	2069	24.6	3.5	44.7	22.5	4.7	28.1	28.5	27.6
	2015	3039	33.3	3.8	40.2	19.3	3.4	37.1	36.9	37.4
United States	2011	1801	35.9	8.9	48.8	2.8	3.7	44.8	46.4	43.0
	2015	1448	39.5	7.5	46.2	3.2	3.7	47.0	43.6	50.7

International Avg (n=40)	2011	30356	35.0	7.5	37.3	16.8	3.4	42.5	39.6	45.3
	2015	30744	38.2	6.8	35.9	14.9	4.2	45.0	42.8	47.1

Ontario, Canada	2011	637	41.5	5.8	42.6	6.1	4.0	47.2	43.4	51.2
	2015	651	38.1	7.1	41.2	7.2	6.5	45.1	44.5	45.7
Quebec, Canada	2011	615	38.0	7.7	40.8	10.7	2.7	45.7	43.9	47.8
	2015	403	48.0	4.3	37.0	7.4	3.3	52.3	52.6	52.0
Norway (4)	2011	442	35.2	4.4	38.7	16.7	5.0	39.6	39.5	39.6
	2015	599	28.9	4.5	38.6	17.2	10.9	33.4	29.6	37.4
Abu Dhabi, UAE	2011	587	20.1	3.8	50.0	20.2	6.0	23.9	24.9	22.9
	2015	716	26.2	2.4	43.4	23.1	4.9	28.6	25.8	31.1
Dubai, UAE	2011	868	31.2	2.7	41.6	21.2	3.4	33.9	33.0	34.7
	2015	1069	45.3	5.9	37.0	9.9	1.8	51.3	51.0	51.5
Florida, US	2011	364	41.9	7.3	43.0	2.5	5.2	49.2	45.5	53.3
	2015	288	45.4	5.5	44.5	2.3	2.3	50.9	49.7	52.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S01_13 (S041303): Physical Science / Knowing Type: MC Key: A
Label: New substances with new properties

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	870	42.8	42.8	14.1	15.9	21.4	2.6	3.4	42.6	42.9
	2015	875	41.7	41.7	12.9	14.8	24.2	3.6	2.8	44.4	38.6
Bahrain	2011	588	42.9	42.9	15.4	13.9	19.0	2.6	6.2	42.9	42.9
	2015	598	51.6	51.6	13.1	14.6	13.7	1.3	5.8	59.1	44.1
Belgium (Flemish)	2011	692	26.1	26.1	14.6	15.3	40.5	1.8	1.7	24.9	27.4
	2015	766	26.7	26.7	16.8	15.6	34.8	2.9	3.3	29.7	23.6
Chile	2011	798	41.9	41.9	12.6	18.7	17.3	2.0	7.4	41.3	42.5
	2015	673	37.6	37.6	13.6	17.6	20.8	2.1	8.4	35.9	38.9
Chinese Taipei	2011	615	66.1	66.1	12.0	11.4	9.2	0.7	0.6	67.2	65.0
	2015	613	64.6	64.6	10.9	10.3	12.9	1.0	0.2	62.7	66.3
Croatia	2011	659	57.9	57.9	9.4	15.9	11.1	3.0	2.6	58.1	57.8
	2015	571	52.4	52.4	11.2	16.2	13.0	3.8	3.4	49.9	54.4
Czech Republic	2011	660	59.0	59.0	10.6	11.8	11.8	4.9	2.0	58.8	59.2
	2015	750	60.9	60.9	7.3	10.5	11.0	5.0	5.4	59.1	62.5
Denmark	2011	566	55.7	55.7	10.4	11.6	14.4	3.5	4.6	53.7	57.6
	2015	526	51.9	51.9	7.3	10.6	14.5	4.9	10.8	45.8	58.0
England	2011	486	41.3	41.3	15.0	15.9	19.6	2.4	5.8	41.6	41.0
	2015	569	47.5	47.5	13.7	13.0	20.6	2.4	2.7	47.2	47.9
Finland	2011	650	73.7	73.7	5.3	8.7	10.1	1.2	1.0	73.0	74.4
	2015	716	70.4	70.4	5.3	5.8	13.3	2.0	3.3	72.7	68.2
Georgia	2011	689	42.0	42.0	16.5	13.8	16.2	2.7	8.9	41.2	42.7
	2015	554	41.8	41.8	14.5	10.0	18.8	1.9	12.8	43.3	40.5
Germany	2011	581	56.1	56.1	8.7	13.2	15.0	4.1	3.0	57.4	54.7
	2015	556	52.3	52.3	8.2	12.6	14.8	6.7	5.4	54.8	50.0
Hong Kong SAR	2011	567	66.4	66.4	10.0	9.5	12.7	0.7	0.7	66.7	66.2
	2015	517	66.2	66.2	9.5	12.0	11.9	0.4	0.0	63.4	68.6
Hungary	2011	741	62.1	62.1	7.7	8.7	15.4	1.3	4.7	59.9	64.0
	2015	715	59.1	59.1	8.9	8.0	14.6	1.4	8.0	60.1	58.1
Iran, Islamic Rep. of	2011	815	35.9	35.9	11.4	16.2	24.5	2.2	9.7	32.4	39.6
	2015	544	31.8	31.8	16.3	12.3	29.0	1.4	9.2	24.8	38.8
Ireland	2011	645	39.4	39.4	13.0	20.4	20.9	4.2	2.2	36.9	42.1
	2015	623	42.2	42.2	12.1	16.3	23.8	1.2	4.4	41.4	42.9
Italy	2011	600	68.0	68.0	7.0	9.7	11.2	2.3	1.8	68.5	67.6
	2015	624	67.9	67.9	11.6	7.5	6.9	3.1	3.0	66.4	69.3
Japan	2011	629	42.2	42.2	12.3	14.9	28.2	1.0	1.4	40.3	44.0
	2015	621	48.5	48.5	13.9	13.5	22.3	0.4	1.3	46.6	50.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_13 (S041303): Physical Science / Knowing Type: MC Key: A
Label: New substances with new properties

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	46.0	46.0	9.0	17.1	20.5	1.4	5.9	42.1	50.2
	2015	668	63.6	63.6	11.3	9.1	13.0	0.5	2.5	61.5	65.6
Korea, Rep. of	2011	619	57.3	57.3	9.1	12.3	20.4	0.7	0.2	53.8	60.7
	2015	664	56.8	56.8	7.8	11.8	21.9	0.8	0.9	51.9	61.5
Kuwait	2011	572	30.8	30.8	19.3	18.4	16.7	5.1	9.7	28.4	33.5
	2015	492	28.9	28.9	17.6	15.6	17.8	8.3	11.8	28.8	29.5
Lithuania	2011	663	50.8	50.8	13.8	11.0	17.9	3.9	2.6	49.4	52.0
	2015	649	55.3	55.3	11.9	9.9	18.5	2.1	2.3	56.9	53.6
Morocco	2011	1056	29.3	29.3	18.6	23.3	15.3	1.5	12.0	31.9	27.1
	2015	729	33.9	33.9	12.3	20.7	18.0	3.8	11.3	30.4	37.2
Netherlands	2011	464	29.4	29.4	19.5	15.6	31.2	2.5	1.8	29.3	29.8
	2015	650	28.2	28.2	14.8	19.8	28.8	2.7	5.6	26.4	30.1
New Zealand	2011	794	42.4	42.4	10.3	21.3	21.9	1.0	3.1	44.1	40.7
	2015	902	40.8	40.8	12.4	17.0	24.4	1.2	4.2	41.4	40.3
Northern Ireland	2011	516	39.3	39.3	13.1	18.0	25.8	2.5	1.3	37.6	41.0
	2015	438	39.4	39.4	18.4	15.5	26.2	0.5	0.0	40.1	38.7
Oman	2011	1495	34.7	34.7	16.3	17.2	21.2	2.6	8.0	36.9	32.4
	2015	1305	39.4	39.4	15.2	16.9	20.3	3.4	4.8	42.1	37.1
Portugal	2011	574	51.6	51.6	7.5	14.0	18.0	4.9	4.1	51.0	52.1
	2015	685	42.9	42.9	10.1	16.6	19.0	4.3	7.1	45.5	40.4
Qatar	2011	591	30.6	30.6	17.9	17.1	28.5	1.9	4.1	31.6	29.8
	2015	728	36.9	36.9	13.4	16.3	24.8	2.0	6.6	35.3	38.6
Russian Federation	2011	642	67.1	67.1	6.8	8.9	12.9	2.0	2.3	68.9	65.5
	2015	705	66.9	66.9	5.7	9.8	13.2	2.5	1.9	66.2	67.6
Saudi Arabia	2011	672	47.8	47.8	13.9	16.8	15.5	1.2	4.7	55.5	39.2
	2015	614	45.1	45.1	18.3	14.7	14.2	1.1	6.5	48.0	42.3
Serbia	2011	625	53.9	53.9	12.8	8.3	15.6	2.3	7.1	49.1	58.7
	2015	590	48.7	48.7	15.4	10.3	15.4	2.3	7.8	50.0	47.6
Singapore	2011	903	53.6	53.6	11.6	12.8	21.3	0.4	0.3	52.2	54.9
	2015	939	56.3	56.3	10.0	13.9	18.6	0.6	0.6	57.0	55.7
Slovak Republic	2011	795	61.2	61.2	9.0	10.8	14.0	2.4	2.7	59.0	63.6
	2015	818	54.6	54.6	11.9	13.2	14.2	2.6	3.5	55.3	53.9
Slovenia	2011	640	57.1	57.1	13.7	11.1	11.7	2.7	3.6	58.0	56.3
	2015	628	59.3	59.3	12.1	9.8	12.0	1.9	4.9	50.4	66.4
Spain	2011	585	55.9	55.9	10.4	11.1	15.0	3.4	4.1	54.9	56.9
	2015	1108	50.8	50.8	10.3	15.1	14.3	1.7	7.8	49.9	51.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S01_13 (S041303): Physical Science / Knowing Type: MC Key: A
Label: New substances with new properties

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	643	52.2	52.2	8.7	13.2	17.1	4.5	4.3	56.0	49.2
	2015	588	52.8	52.8	10.1	13.3	14.5	3.7	5.6	48.6	56.9
Turkey	2011	1083	38.3	38.3	17.9	14.0	25.3	0.6	3.9	33.7	42.4
	2015	925	34.2	34.2	22.1	13.2	26.3	0.7	3.6	33.1	35.3
United Arab Emirates	2011	2069	38.7	38.7	13.6	17.5	23.2	1.5	5.5	40.4	36.9
	2015	3039	40.6	40.6	14.9	16.9	21.6	2.0	3.9	40.4	40.9
United States	2011	1801	40.5	40.5	13.5	18.3	21.8	1.8	4.1	40.0	40.9
	2015	1448	44.9	44.9	11.7	17.4	18.7	2.2	5.1	45.3	44.5

International Avg (n=40)	2011	30275	48.2	48.2	12.3	14.3	18.7	2.4	4.1	47.8	48.6
	2015	30723	48.4	48.4	12.4	13.5	18.4	2.4	5.0	47.8	48.9

Ontario, Canada	2011	637	38.6	38.6	11.6	17.4	25.0	2.7	4.8	35.6	41.6
	2015	646	39.3	39.3	11.0	15.5	22.4	3.6	8.2	40.1	38.7
Quebec, Canada	2011	615	52.0	52.0	7.5	14.3	20.6	1.9	3.7	51.8	52.1
	2015	402	56.2	56.2	11.2	13.4	14.0	1.0	4.2	60.3	53.0
Norway (4)	2011	442	54.0	54.0	8.5	14.0	14.9	3.2	5.4	55.0	53.1
	2015	599	53.4	53.4	8.4	12.6	10.9	3.0	11.7	56.8	49.7
Abu Dhabi, UAE	2011	587	38.6	38.6	12.6	17.7	22.4	1.6	7.1	43.2	33.9
	2015	716	34.8	34.8	16.6	20.1	21.2	1.6	5.7	32.8	36.6
Dubai, UAE	2011	868	39.2	39.2	14.2	15.7	25.0	1.6	4.4	38.7	39.5
	2015	1069	52.4	52.4	11.4	12.3	19.8	1.8	2.4	51.7	52.9
Florida, US	2011	364	43.5	43.5	12.0	18.1	20.2	0.7	5.4	46.6	40.1
	2015	288	58.2	58.2	9.0	12.8	16.5	0.8	2.8	56.8	59.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_01 (S051041): Life Science / Knowing Type: MC Key: C
Label: Which is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	57.0	9.4	16.4	57.0	13.7	3.2	0.3	55.9	58.1
	2015	841	63.3	8.6	14.1	63.3	11.3	2.7	0.1	67.4	59.4
Bahrain	2011	576	62.2	10.3	13.3	62.2	11.2	2.1	0.9	62.4	61.9
	2015	592	53.0	14.5	14.3	53.0	14.4	3.3	0.6	56.9	49.2
Belgium (Flemish)	2011	704	41.6	12.5	19.1	41.6	15.0	11.6	0.2	42.0	41.3
	2015	775	44.1	9.0	17.9	44.1	17.1	11.9	0.1	46.1	42.2
Chile	2011	790	57.4	9.1	15.9	57.4	14.0	2.3	1.4	55.2	59.4
	2015	677	47.3	9.7	25.1	47.3	16.2	1.1	0.6	43.5	51.2
Chinese Taipei	2011	613	77.4	1.3	11.8	77.4	4.2	5.4	0.0	72.4	81.8
	2015	606	77.9	2.6	10.4	77.9	4.6	4.4	0.0	78.6	77.3
Croatia	2011	646	28.6	18.6	13.1	28.6	36.0	3.6	0.0	24.6	32.7
	2015	565	36.0	22.5	19.2	36.0	18.8	3.5	0.0	38.8	33.3
Czech Republic	2011	662	83.2	3.1	7.1	83.2	5.6	1.0	0.0	85.3	81.1
	2015	731	86.0	3.6	5.8	86.0	3.3	1.3	0.0	87.9	84.1
Denmark	2011	563	69.6	4.9	13.3	69.6	8.9	2.6	0.7	72.1	67.1
	2015	533	70.1	4.5	14.1	70.1	7.3	3.4	0.6	73.6	66.6
England	2011	482	57.9	10.3	12.3	57.9	15.4	3.7	0.6	58.3	57.5
	2015	569	63.1	6.6	12.3	63.1	14.9	3.1	0.1	65.4	61.1
Finland	2011	667	66.5	9.8	12.1	66.5	7.0	4.5	0.1	72.5	60.8
	2015	720	60.2	15.1	10.1	60.2	7.1	7.3	0.2	66.1	54.7
Georgia	2011	678	65.2	1.9	8.5	65.2	10.8	13.3	0.3	62.9	67.3
	2015	562	70.2	2.0	11.2	70.2	10.2	5.5	0.8	66.0	74.5
Germany	2011	569	51.8	10.2	16.9	51.8	14.0	7.0	0.0	50.3	53.3
	2015	564	45.3	13.1	17.7	45.3	15.3	8.6	0.0	45.8	44.8
Hong Kong SAR	2011	575	44.2	5.8	29.3	44.2	18.5	1.9	0.4	43.2	45.1
	2015	507	51.7	6.1	26.7	51.7	14.5	1.0	0.0	47.8	54.4
Hungary	2011	729	74.5	7.2	6.4	74.5	3.2	7.7	0.9	78.1	70.9
	2015	725	76.7	5.3	6.0	76.7	0.9	11.0	0.1	79.6	73.7
Iran, Islamic Rep. of	2011	822	51.8	14.6	21.5	51.8	9.0	2.6	0.6	48.2	55.3
	2015	547	52.9	6.8	16.9	52.9	17.4	5.7	0.3	48.6	56.8
Ireland	2011	647	50.8	6.8	22.0	50.8	17.7	2.4	0.2	49.6	52.1
	2015	620	53.2	5.4	18.7	53.2	19.5	2.8	0.3	50.8	55.3
Italy	2011	605	62.7	8.4	12.4	62.7	11.3	4.7	0.5	63.6	61.9
	2015	633	63.5	4.8	13.2	63.5	15.5	3.0	0.0	64.9	62.2
Japan	2011	627	29.8	25.0	17.1	29.8	20.4	7.6	0.1	28.8	30.8
	2015	627	26.2	30.2	17.9	26.2	15.5	9.9	0.3	20.7	31.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_01 (S051041): Life Science / Knowing Type: MC Key: C
Label: Which is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	58.4	21.1	9.4	58.4	9.5	1.1	0.6	54.4	62.2
	2015	676	86.1	6.1	4.2	86.1	3.5	0.1	0.0	85.5	86.8
Korea, Rep. of	2011	625	29.6	33.9	10.8	29.6	25.3	0.4	0.0	27.1	32.0
	2015	669	35.5	38.7	7.9	35.5	17.7	0.2	0.0	33.6	37.2
Kuwait	2011	587	34.5	14.8	18.1	34.5	21.3	9.8	1.5	31.5	38.1
	2015	499	31.5	20.0	15.6	31.5	19.5	12.1	1.3	32.9	30.4
Lithuania	2011	664	48.4	16.6	21.0	48.4	9.5	4.5	0.0	46.3	50.5
	2015	657	54.0	15.5	20.8	54.0	5.6	4.1	0.0	58.2	49.8
Morocco	2011	1103	39.3	14.1	17.0	39.3	13.6	15.0	0.8	38.5	40.0
	2015	716	50.4	11.0	15.4	50.4	11.9	10.3	1.1	53.8	47.2
Netherlands	2011	454	47.3	8.9	19.9	47.3	14.7	9.1	0.0	44.2	51.5
	2015	653	44.2	10.4	15.8	44.2	19.6	10.0	0.1	44.7	43.7
New Zealand	2011	788	51.2	7.8	20.3	51.2	16.6	2.4	1.6	52.9	49.6
	2015	904	54.9	8.2	15.3	54.9	18.0	3.2	0.4	57.7	52.3
Northern Ireland	2011	516	59.7	7.9	13.8	59.7	15.4	3.2	0.0	59.4	60.2
	2015	427	60.7	5.7	11.9	60.7	20.4	1.4	0.0	62.3	59.5
Oman	2011	1492	48.4	14.0	13.0	48.4	17.0	6.9	0.7	51.2	45.5
	2015	1287	51.1	15.8	14.9	51.1	16.3	1.6	0.2	53.4	48.6
Portugal	2011	572	67.1	4.3	14.5	67.1	11.7	2.4	0.0	66.6	67.5
	2015	659	62.1	5.6	11.9	62.1	17.0	3.4	0.0	61.5	62.7
Qatar	2011	585	45.5	14.8	16.2	45.5	19.4	3.6	0.5	49.6	41.8
	2015	739	55.9	13.5	16.9	55.9	9.9	3.2	0.6	57.0	54.7
Russian Federation	2011	626	48.0	29.1	10.6	48.0	10.2	2.0	0.0	48.9	47.1
	2015	705	53.9	19.8	14.2	53.9	9.1	2.9	0.2	53.1	54.6
Saudi Arabia	2011	509	62.0	18.4	9.6	62.0	9.7	0.1	0.2	64.9	59.1
	2015	615	47.7	24.6	11.5	47.7	12.6	3.2	0.4	46.9	48.6
Serbia	2011	622	51.2	10.7	11.7	51.2	18.9	7.3	0.2	53.5	48.9
	2015	583	53.1	11.5	13.2	53.1	15.5	6.7	0.0	54.6	51.7
Singapore	2011	906	77.3	1.4	10.5	77.3	9.7	1.0	0.1	76.4	78.2
	2015	929	83.8	0.8	8.0	83.8	7.4	0.1	0.0	81.7	85.7
Slovak Republic	2011	800	72.1	7.2	11.0	72.1	7.1	2.6	0.1	70.6	73.6
	2015	813	68.4	5.7	18.0	68.4	5.2	2.7	0.0	71.6	65.5
Slovenia	2011	629	49.4	14.5	12.7	49.4	19.6	3.5	0.3	49.3	49.6
	2015	624	54.1	16.9	9.2	54.1	16.2	3.6	0.0	55.6	52.8
Spain	2011	600	65.4	5.7	11.0	65.4	11.4	6.5	0.0	62.3	68.3
	2015	1112	70.0	3.5	9.9	70.0	9.1	7.5	0.0	66.5	73.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_01 (S051041): Life Science / Knowing Type: MC Key: C
Label: Which is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	48.8	21.6	13.3	48.8	8.9	7.0	0.4	51.1	46.6
	2015	599	51.9	20.0	11.9	51.9	7.6	8.4	0.1	50.8	53.1
Turkey	2011	1065	62.3	6.7	14.4	62.3	14.8	1.4	0.4	60.2	64.4
	2015	910	53.7	8.6	22.7	53.7	13.8	1.1	0.1	51.6	55.9
United Arab Emirates	2011	2104	53.0	14.4	11.9	53.0	15.2	4.9	0.6	53.2	52.8
	2015	3017	55.2	13.0	15.7	55.2	12.3	3.8	0.1	57.6	52.8
United States	2011	1800	70.9	3.7	14.5	70.9	7.2	3.0	0.6	70.8	71.1
	2015	1419	66.9	6.1	13.5	66.9	10.4	2.8	0.2	66.9	66.9

International Avg (n=40)	2011	30196	55.6	11.5	14.3	55.6	13.6	4.6	0.4	55.2	55.9
	2015	30606	57.1	11.3	14.3	57.1	12.6	4.5	0.2	57.7	56.6

Ontario, Canada	2011	671	65.4	5.8	12.0	65.4	12.8	3.5	0.6	66.2	64.5
	2015	644	66.9	7.1	12.0	66.9	11.0	2.3	0.7	71.0	63.1
Quebec, Canada	2011	599	57.5	7.1	12.9	57.5	16.4	5.9	0.1	65.1	49.5
	2015	378	59.0	7.0	14.3	59.0	17.5	2.0	0.1	58.5	59.6
Norway (4)	2011	450	39.3	20.7	23.6	39.3	8.8	6.9	0.6	46.4	31.7
	2015	587	41.8	27.1	14.1	41.8	7.9	8.9	0.2	43.7	40.0
Abu Dhabi, UAE	2011	601	54.6	16.2	11.5	54.6	11.1	5.7	0.8	54.4	54.9
	2015	713	51.5	15.3	14.8	51.5	13.5	4.7	0.2	56.3	46.9
Dubai, UAE	2011	872	52.3	8.6	14.4	52.3	20.9	3.2	0.6	53.9	50.9
	2015	1060	62.2	8.5	16.3	62.2	10.4	2.7	0.0	65.3	59.3
Florida, US	2011	379	74.0	1.9	14.6	74.0	9.1	0.4	0.0	72.6	75.7
	2015	287	68.9	4.8	13.8	68.9	11.0	1.5	0.0	70.0	67.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_02 (S051037): Life Science / Knowing Type: CR 1 Point
Label: Body changes from running

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	60.3	19.9	14.0	5.3	0.5	60.3	65.1	55.5
	2015	841	59.4	22.7	13.8	3.8	0.3	59.4	64.8	54.4
Bahrain	2011	576	24.1	22.5	41.4	11.1	0.9	24.1	27.9	20.0
	2015	592	40.2	19.7	28.8	10.8	0.6	40.2	45.2	35.3
Belgium (Flemish)	2011	704	42.2	31.1	22.2	4.3	0.2	42.2	43.6	40.7
	2015	775	49.5	29.3	16.8	4.3	0.1	49.5	51.6	47.5
Chile	2011	790	40.6	24.4	25.1	8.4	1.6	40.6	41.8	39.5
	2015	677	42.5	26.7	18.7	11.2	0.9	42.5	43.7	41.1
Chinese Taipei	2011	613	40.9	23.0	28.1	8.0	0.0	40.9	43.1	38.8
	2015	606	42.1	27.6	24.4	5.9	0.0	42.1	44.2	40.3
Croatia	2011	646	59.9	23.1	10.9	6.0	0.2	59.9	62.6	57.1
	2015	565	65.6	22.7	7.7	3.8	0.1	65.6	66.3	65.0
Czech Republic	2011	662	66.6	21.9	5.4	6.1	0.0	66.6	67.2	66.0
	2015	731	65.9	18.6	7.3	8.2	0.0	65.9	66.0	65.8
Denmark	2011	563	52.9	22.2	15.0	9.2	0.7	52.9	55.8	50.0
	2015	533	51.5	26.4	15.1	6.4	0.6	51.5	57.1	45.8
England	2011	482	62.1	20.5	11.3	5.5	0.6	62.1	64.9	59.7
	2015	569	69.4	18.6	8.9	3.1	0.1	69.4	72.2	66.9
Finland	2011	667	62.6	22.3	9.7	5.3	0.1	62.6	65.0	60.3
	2015	720	61.5	24.9	8.8	4.6	0.2	61.5	65.7	57.5
Georgia	2011	678	53.7	20.6	10.1	15.3	0.3	53.7	56.0	51.5
	2015	562	48.7	26.4	12.1	11.8	0.9	48.7	49.0	48.4
Germany	2011	569	38.1	25.2	24.1	12.5	0.0	38.1	40.5	35.9
	2015	564	43.7	18.4	27.3	10.6	0.0	43.7	43.8	43.4
Hong Kong SAR	2011	575	45.3	24.3	22.8	7.3	0.4	45.3	51.3	39.9
	2015	507	58.2	23.6	13.7	4.5	0.0	58.2	55.8	59.8
Hungary	2011	731	61.3	17.4	13.9	6.3	1.1	61.3	64.6	58.0
	2015	725	60.3	20.5	14.8	4.1	0.3	60.3	60.8	59.9
Iran, Islamic Rep. of	2011	822	33.1	25.0	18.0	23.2	0.6	33.1	36.8	29.6
	2015	547	30.8	23.1	25.2	20.5	0.5	30.8	34.4	27.4
Ireland	2011	645	56.1	19.3	16.7	7.7	0.2	56.1	56.7	55.5
	2015	620	66.1	17.2	13.4	3.0	0.3	66.1	64.8	67.1
Italy	2011	605	48.3	27.3	16.0	7.9	0.6	48.3	47.2	49.4
	2015	633	56.9	21.9	12.4	8.9	0.0	56.9	55.9	57.7
Japan	2011	627	59.1	24.8	12.1	3.9	0.1	59.1	59.0	59.2
	2015	627	79.3	12.5	4.7	3.3	0.3	79.3	81.8	77.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_02 (S051037): Life Science / Knowing Type: CR 1 Point
Label: Body changes from running

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	629	43.0	21.4	22.7	12.3	0.6	43.0	46.4	39.7
	2015	676	77.4	10.4	7.8	4.4	0.0	77.4	79.7	75.0
Korea, Rep. of	2011	625	46.7	26.1	25.2	2.1	0.0	46.7	45.5	47.7
	2015	669	54.1	30.1	15.2	0.5	0.1	54.1	56.2	52.1
Kuwait	2011	592	9.7	9.8	45.3	33.7	1.4	9.7	10.4	8.8
	2015	499	12.1	13.9	34.5	38.2	1.3	12.1	11.3	13.0
Lithuania	2011	664	55.3	21.2	18.0	5.6	0.0	55.3	58.6	52.0
	2015	657	48.8	25.5	19.2	6.5	0.0	48.8	52.8	44.9
Morocco	2011	1111	18.4	7.1	33.1	40.6	0.8	18.4	19.0	17.9
	2015	716	12.3	16.1	43.0	27.3	1.3	12.3	9.2	15.1
Netherlands	2011	454	58.5	30.4	9.7	1.4	0.0	58.5	59.8	57.4
	2015	654	63.3	24.7	9.2	2.6	0.1	63.3	70.6	56.5
New Zealand	2011	788	47.2	22.1	24.2	4.7	1.8	47.2	47.9	46.4
	2015	904	44.8	25.0	25.4	4.3	0.5	44.8	48.3	41.5
Northern Ireland	2011	516	61.5	22.1	12.3	4.1	0.0	61.5	66.5	55.8
	2015	432	59.6	20.0	15.5	4.9	0.0	59.6	57.8	60.9
Oman	2011	1492	16.5	15.5	44.8	22.3	0.9	16.5	19.5	13.5
	2015	1294	26.4	15.7	45.9	11.8	0.2	26.4	29.2	23.3
Portugal	2011	572	58.7	18.0	19.6	3.5	0.2	58.7	63.7	53.7
	2015	659	60.7	17.8	15.5	5.9	0.2	60.7	63.8	57.6
Qatar	2011	585	23.4	15.6	43.4	17.0	0.5	23.4	24.3	22.6
	2015	739	26.1	22.3	34.9	16.1	0.6	26.1	28.7	23.4
Russian Federation	2011	626	63.6	18.5	11.1	6.9	0.0	63.6	70.9	56.6
	2015	705	65.3	18.2	8.8	7.4	0.2	65.3	64.2	66.3
Saudi Arabia	2011	510	28.2	21.6	35.1	14.9	0.2	28.2	34.5	21.6
	2015	629	21.1	16.5	35.7	25.9	0.8	21.1	25.4	16.8
Serbia	2011	622	56.0	24.6	10.2	8.8	0.2	56.0	60.9	51.2
	2015	583	48.4	27.6	11.6	12.2	0.2	48.4	47.0	49.6
Singapore	2011	906	66.6	17.6	14.1	1.6	0.1	66.6	70.2	63.2
	2015	929	69.7	15.8	13.1	1.4	0.0	69.7	70.1	69.4
Slovak Republic	2011	800	60.6	20.0	12.3	7.0	0.1	60.6	60.4	60.8
	2015	813	57.8	20.2	12.8	9.2	0.0	57.8	60.7	55.3
Slovenia	2011	644	61.0	22.1	10.5	6.2	0.3	61.0	67.2	55.6
	2015	623	56.6	24.9	12.3	6.0	0.1	56.6	56.7	56.6
Spain	2011	600	47.5	21.7	20.9	9.7	0.2	47.5	49.9	45.2
	2015	1112	52.1	22.1	20.7	5.1	0.0	52.1	53.2	51.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_02 (S051037): Life Science / Knowing Type: CR 1 Point
Label: Body changes from running

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	59.1	23.4	10.9	6.2	0.4	59.1	59.5	58.8
	2015	599	67.5	18.5	9.0	4.6	0.4	67.5	69.2	65.8
Turkey	2011	1065	46.0	29.3	17.6	6.6	0.5	46.0	48.0	44.1
	2015	910	50.1	28.7	17.1	3.9	0.2	50.1	51.0	49.1
United Arab Emirates	2011	2104	32.2	19.6	32.1	15.4	0.6	32.2	35.2	29.2
	2015	3017	37.6	20.1	29.6	12.6	0.1	37.6	42.1	33.3
United States	2011	1800	64.4	18.8	13.8	2.1	0.9	64.4	65.4	63.4
	2015	1419	63.2	20.9	13.8	2.0	0.2	63.2	66.7	59.2

International Avg (n=40)	2011	30224	48.3	21.5	20.1	9.6	0.4	48.3	50.8	45.8
	2015	30632	51.7	21.4	18.1	8.5	0.3	51.7	53.4	49.9

Ontario, Canada	2011	671	58.9	21.1	15.4	3.8	0.8	58.9	61.5	56.3
	2015	651	53.5	25.5	15.5	4.2	1.4	53.5	58.2	49.0
Quebec, Canada	2011	599	62.7	17.7	12.8	6.6	0.1	62.7	64.4	61.0
	2015	395	57.3	22.8	13.0	5.4	1.5	57.3	59.2	55.3
Norway (4)	2011	450	60.3	22.3	11.6	5.0	0.7	60.3	60.2	60.5
	2015	587	57.3	26.8	10.3	5.3	0.3	57.3	64.9	49.8
Abu Dhabi, UAE	2011	601	27.1	19.2	38.8	14.0	0.8	27.1	31.6	22.8
	2015	713	30.0	21.6	35.3	12.8	0.2	30.0	33.7	26.5
Dubai, UAE	2011	872	43.7	20.4	21.4	13.9	0.6	43.7	46.2	41.4
	2015	1060	53.5	20.3	19.7	6.5	0.0	53.5	58.9	48.2
Florida, US	2011	379	61.4	20.1	16.1	2.2	0.2	61.4	67.5	54.2
	2015	287	67.8	20.8	9.5	1.6	0.3	67.8	71.1	64.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_03 (S051008): Life Science / Reasoning Type: CR 1 Point
Label: Pots with and without fertilizer

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	22.3	74.4	2.8	0.6	22.3	23.0	21.5
	2015	841	25.0	72.2	2.4	0.5	25.0	30.3	20.0
Bahrain	2011	576	15.3	79.0	4.7	0.9	15.3	17.1	13.5
	2015	592	14.4	79.5	5.0	1.1	14.4	15.3	13.5
Belgium (Flemish)	2011	704	22.9	74.8	2.1	0.2	22.9	25.3	20.5
	2015	775	32.1	63.8	3.9	0.1	32.1	40.3	24.4
Chile	2011	790	11.5	81.4	5.1	2.0	11.5	12.5	10.6
	2015	678	5.9	85.2	6.8	2.1	5.9	7.4	4.5
Chinese Taipei	2011	613	26.1	64.2	9.7	0.0	26.1	30.8	22.0
	2015	606	32.8	65.9	1.3	0.0	32.8	35.3	30.6
Croatia	2011	646	18.0	77.8	4.0	0.2	18.0	20.9	15.1
	2015	565	30.8	64.6	4.5	0.1	30.8	35.6	26.0
Czech Republic	2011	662	19.1	71.9	9.0	0.0	19.1	22.4	16.0
	2015	731	20.3	72.9	6.6	0.1	20.3	25.0	15.7
Denmark	2011	563	34.6	55.5	9.1	0.8	34.6	42.1	26.9
	2015	533	29.5	65.0	4.6	0.9	29.5	35.9	22.9
England	2011	482	24.8	71.4	3.2	0.6	24.8	28.5	21.6
	2015	569	30.4	66.8	2.8	0.1	30.4	37.9	23.6
Finland	2011	667	32.7	63.0	4.2	0.1	32.7	35.1	30.4
	2015	720	36.1	61.0	2.8	0.2	36.1	43.7	28.8
Georgia	2011	678	11.9	75.5	12.2	0.3	11.9	13.4	10.6
	2015	562	8.8	80.8	9.1	1.3	8.8	8.2	9.5
Germany	2011	569	34.8	61.5	3.6	0.2	34.8	39.0	30.7
	2015	564	31.1	64.7	4.1	0.0	31.1	36.8	26.3
Hong Kong SAR	2011	575	29.3	69.2	1.1	0.4	29.3	34.8	24.4
	2015	507	36.0	63.8	0.2	0.0	36.0	39.2	33.9
Hungary	2011	731	21.6	74.2	3.0	1.1	21.6	23.3	19.9
	2015	725	23.7	71.8	4.3	0.3	23.7	23.9	23.4
Iran, Islamic Rep. of	2011	823	14.5	74.6	10.1	0.9	14.5	15.4	13.6
	2015	547	11.2	79.7	7.3	1.8	11.2	13.4	9.2
Ireland	2011	647	18.7	79.1	2.0	0.2	18.7	20.6	16.7
	2015	620	21.9	75.1	2.7	0.3	21.9	20.6	22.9
Italy	2011	605	17.4	74.8	7.1	0.6	17.4	17.5	17.3
	2015	633	13.1	78.8	7.9	0.2	13.1	17.4	9.2
Japan	2011	627	48.8	48.4	2.2	0.6	48.8	54.2	43.4
	2015	628	48.8	46.6	3.8	0.9	48.8	52.7	45.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_03 (S051008): Life Science / Reasoning Type: CR 1 Point
Label: Pots with and without fertilizer

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	26.9	64.0	8.1	1.0	26.9	27.5	26.3
	2015	676	57.7	40.7	1.3	0.2	57.7	59.1	56.3
Korea, Rep. of	2011	625	38.1	61.0	0.9	0.0	38.1	40.1	36.3
	2015	669	43.1	56.1	0.7	0.1	43.1	46.2	40.1
Kuwait	2011	592	2.8	85.7	9.7	1.8	2.8	3.3	2.2
	2015	499	4.4	79.9	13.8	2.0	4.4	4.8	3.9
Lithuania	2011	664	22.3	71.8	5.9	0.0	22.3	25.2	19.4
	2015	657	24.5	72.1	3.3	0.1	24.5	30.2	18.9
Morocco	2011	1110	8.3	66.6	23.9	1.2	8.3	7.0	9.4
	2015	718	8.7	77.6	12.1	1.5	8.7	8.6	8.8
Netherlands	2011	454	25.2	73.4	1.4	0.0	25.2	29.0	20.7
	2015	654	23.7	74.6	1.7	0.1	23.7	26.2	21.3
New Zealand	2011	788	16.5	79.8	1.7	1.9	16.5	19.0	14.0
	2015	904	19.5	78.1	1.8	0.6	19.5	21.3	17.8
Northern Ireland	2011	516	25.4	72.3	2.4	0.0	25.4	27.3	23.2
	2015	432	24.1	74.4	1.1	0.4	24.1	29.7	19.9
Oman	2011	1492	3.3	88.4	7.3	1.0	3.3	4.3	2.3
	2015	1294	6.6	89.1	3.9	0.4	6.6	7.9	5.1
Portugal	2011	572	11.9	86.5	1.3	0.3	11.9	12.7	11.2
	2015	659	11.6	85.9	2.0	0.5	11.6	11.8	11.3
Qatar	2011	585	11.0	82.8	5.5	0.7	11.0	11.9	10.1
	2015	739	13.7	79.8	6.0	0.6	13.7	19.1	7.9
Russian Federation	2011	626	21.2	76.1	2.7	0.0	21.2	26.4	16.3
	2015	706	29.8	67.8	2.3	0.2	29.8	30.5	29.1
Saudi Arabia	2011	511	10.2	81.3	8.0	0.6	10.2	14.3	5.8
	2015	629	5.8	80.8	11.8	1.5	5.8	9.4	2.3
Serbia	2011	622	21.0	71.5	7.0	0.5	21.0	22.8	19.3
	2015	583	20.3	73.6	5.9	0.2	20.3	22.4	18.4
Singapore	2011	906	57.0	42.7	0.2	0.1	57.0	63.5	50.9
	2015	929	58.8	41.2	0.0	0.0	58.8	61.9	56.1
Slovak Republic	2011	800	12.1	85.0	2.9	0.1	12.1	10.5	13.7
	2015	813	13.7	81.2	5.0	0.1	13.7	17.0	10.9
Slovenia	2011	644	19.6	75.2	5.0	0.3	19.6	22.5	17.0
	2015	624	22.3	72.7	4.8	0.2	22.3	27.6	17.8
Spain	2011	600	12.3	80.7	6.9	0.2	12.3	14.0	10.6
	2015	1112	18.7	75.6	5.6	0.1	18.7	18.3	19.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_03 (S051008): Life Science / Reasoning Type: CR 1 Point
Label: Pots with and without fertilizer

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	24.8	70.2	4.5	0.5	24.8	28.7	20.9
	2015	599	35.5	59.6	4.4	0.4	35.5	42.2	29.1
Turkey	2011	1065	13.5	81.6	4.2	0.6	13.5	15.4	11.7
	2015	910	12.9	83.5	3.4	0.2	12.9	15.3	10.6
United Arab Emirates	2011	2104	9.3	83.7	6.2	0.9	9.3	9.6	9.0
	2015	3017	12.8	83.2	3.8	0.2	12.8	12.2	13.4
United States	2011	1800	22.9	74.9	1.1	1.1	22.9	26.2	19.8
	2015	1419	22.4	75.7	1.5	0.3	22.4	23.7	21.0

International Avg (n=40)	2011	30228	21.0	73.1	5.3	0.6	21.0	23.4	18.6
	2015	30638	23.6	71.5	4.4	0.5	23.6	26.6	20.7

Ontario, Canada	2011	671	26.9	69.6	2.3	1.2	26.9	33.3	20.6
	2015	651	19.7	77.1	1.5	1.7	19.7	22.9	16.7
Quebec, Canada	2011	598	18.3	77.8	3.5	0.4	18.3	20.1	16.4
	2015	395	22.9	71.4	4.0	1.7	22.9	27.9	17.5
Norway (4)	2011	450	21.3	71.7	5.2	1.8	21.3	25.5	16.7
	2015	587	18.0	77.0	4.5	0.5	18.0	17.2	18.7
Abu Dhabi, UAE	2011	601	6.4	85.6	7.0	1.0	6.4	7.3	5.5
	2015	713	9.5	86.2	3.8	0.6	9.5	8.2	10.7
Dubai, UAE	2011	872	16.0	77.5	5.5	1.0	16.0	15.5	16.5
	2015	1060	21.4	76.9	1.7	0.0	21.4	22.0	20.8
Florida, US	2011	379	19.6	79.5	0.7	0.2	19.6	23.5	14.9
	2015	287	25.4	72.0	2.3	0.3	25.4	27.8	22.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_04 (S051004): Life Science / Applying Type: MC Key: A
Label: Birds similar color as environment

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	69.4	69.4	4.0	10.4	12.8	2.4	1.0	71.1	67.8
	2015	841	74.1	74.1	3.5	8.6	10.5	2.8	0.5	72.7	75.4
Bahrain	2011	576	56.8	56.8	6.7	23.0	10.7	1.8	1.1	58.0	55.5
	2015	592	51.6	51.6	8.0	22.6	14.6	2.1	1.2	56.0	47.3
Belgium (Flemish)	2011	704	67.6	67.6	10.3	7.4	11.6	2.7	0.4	67.2	68.0
	2015	775	72.9	72.9	7.9	5.8	10.8	2.4	0.3	75.3	70.8
Chile	2011	790	56.7	56.7	7.3	19.4	12.6	1.7	2.4	51.7	61.3
	2015	678	62.5	62.5	8.7	14.8	7.8	3.2	2.9	60.4	64.6
Chinese Taipei	2011	613	72.3	72.3	3.9	13.6	8.6	1.5	0.0	71.9	72.7
	2015	606	77.7	77.7	2.9	10.8	6.5	2.0	0.0	78.9	76.7
Croatia	2011	646	71.0	71.0	5.5	8.7	13.1	1.6	0.2	69.9	72.0
	2015	565	76.9	76.9	2.5	7.1	12.3	1.2	0.1	75.3	78.4
Czech Republic	2011	662	82.4	82.4	4.5	6.2	5.3	1.5	0.1	80.6	84.0
	2015	731	85.4	85.4	4.0	5.0	4.8	0.6	0.2	89.5	81.4
Denmark	2011	563	63.8	63.8	6.6	17.5	7.4	2.8	1.9	61.4	66.4
	2015	533	70.7	70.7	2.6	14.8	8.1	2.2	1.6	68.0	73.4
England	2011	482	66.7	66.7	5.3	10.8	14.5	1.8	0.9	68.6	65.1
	2015	569	71.3	71.3	4.3	8.4	13.3	2.6	0.2	73.7	69.1
Finland	2011	667	87.5	87.5	2.1	4.3	4.0	2.0	0.1	87.9	87.1
	2015	720	86.7	86.7	2.0	3.6	5.6	1.6	0.4	88.4	85.1
Georgia	2011	678	54.6	54.6	6.9	24.8	10.0	3.3	0.4	52.6	56.4
	2015	562	58.9	58.9	5.8	22.0	9.0	3.0	1.3	59.9	57.9
Germany	2011	569	71.5	71.5	7.0	7.3	10.9	3.1	0.2	76.5	66.8
	2015	564	71.6	71.6	4.6	6.9	12.0	4.6	0.2	70.8	72.2
Hong Kong SAR	2011	575	71.1	71.1	5.0	12.4	9.5	1.7	0.4	74.3	68.3
	2015	507	81.9	81.9	1.8	9.1	5.8	1.4	0.0	80.3	82.9
Hungary	2011	731	79.8	79.8	4.9	5.2	5.7	3.3	1.1	79.8	79.7
	2015	725	78.2	78.2	5.6	6.7	4.9	4.1	0.5	77.9	78.4
Iran, Islamic Rep. of	2011	823	46.6	46.6	9.4	18.8	18.7	5.4	1.1	47.0	46.2
	2015	547	49.7	49.7	7.1	16.2	22.4	2.4	2.2	52.6	47.0
Ireland	2011	647	63.8	63.8	6.1	13.6	13.5	2.7	0.3	61.5	66.2
	2015	620	70.0	70.0	4.0	11.0	12.3	2.3	0.3	67.1	72.5
Italy	2011	605	71.4	71.4	8.5	6.8	9.3	3.0	1.0	71.4	71.3
	2015	633	73.8	73.8	8.3	5.5	8.9	3.2	0.4	75.0	72.6
Japan	2011	627	78.3	78.3	1.5	1.3	16.3	2.1	0.6	79.8	76.8
	2015	628	79.4	79.4	0.7	1.6	14.0	3.4	0.9	84.7	74.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_04 (S051004): Life Science / Applying Type: MC Key: A
Label: Birds similar color as environment

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	65.6	65.6	8.4	10.6	11.5	2.6	1.3	65.5	65.7
	2015	676	82.1	82.1	4.8	6.8	5.4	0.4	0.5	84.2	79.9
Korea, Rep. of	2011	625	85.6	85.6	1.9	3.2	9.0	0.3	0.0	85.6	85.5
	2015	669	91.0	91.0	1.4	1.0	6.2	0.3	0.1	90.7	91.3
Kuwait	2011	583	41.7	41.7	14.6	22.4	14.4	5.3	1.7	43.5	39.3
	2015	499	45.4	45.4	12.6	20.1	10.5	9.4	2.0	45.6	45.9
Lithuania	2011	664	72.9	72.9	4.1	6.3	15.0	1.7	0.0	72.3	73.4
	2015	657	75.2	75.2	3.5	5.9	12.9	2.3	0.1	77.7	72.8
Morocco	2011	1102	39.9	39.9	24.0	15.8	11.3	7.7	1.2	38.5	41.1
	2015	718	35.0	35.0	18.0	23.6	17.2	4.7	1.6	34.6	35.4
Netherlands	2011	454	86.3	86.3	3.7	3.4	5.3	1.3	0.0	87.6	85.2
	2015	654	81.4	81.4	4.0	3.7	8.6	2.2	0.1	85.4	77.7
New Zealand	2011	788	64.2	64.2	6.7	12.6	12.6	2.0	1.9	65.6	62.7
	2015	904	66.3	66.3	6.6	10.4	13.6	2.4	0.7	63.6	68.9
Northern Ireland	2011	516	72.6	72.6	4.2	10.1	10.6	2.6	0.0	73.0	72.1
	2015	422	75.7	75.7	1.7	9.0	13.4	0.2	0.0	77.3	74.5
Oman	2011	1492	42.7	42.7	15.3	21.7	14.2	4.8	1.4	42.7	42.7
	2015	1293	52.1	52.1	12.3	19.0	13.1	2.7	0.6	52.5	51.7
Portugal	2011	572	46.0	46.0	9.9	25.1	16.8	1.9	0.3	46.2	45.8
	2015	659	48.5	48.5	9.2	21.4	17.1	3.0	0.7	48.4	48.6
Qatar	2011	585	37.8	37.8	13.0	28.0	16.7	3.9	0.7	38.2	37.5
	2015	739	45.5	45.5	10.2	24.7	15.9	3.1	0.7	46.8	44.1
Russian Federation	2011	626	77.2	77.2	6.7	5.8	8.9	1.2	0.1	77.9	76.6
	2015	706	82.3	82.3	3.1	3.0	8.8	2.5	0.2	82.5	82.2
Saudi Arabia	2011	511	45.5	45.5	11.3	23.4	18.7	0.5	0.6	46.4	44.6
	2015	627	44.3	44.3	12.1	24.3	13.5	3.8	2.1	42.4	46.1
Serbia	2011	622	68.8	68.8	5.8	10.5	12.1	2.0	0.9	68.9	68.6
	2015	583	71.4	71.4	5.1	10.3	9.7	3.1	0.4	73.6	69.4
Singapore	2011	906	75.1	75.1	3.2	15.7	5.7	0.2	0.1	74.4	75.8
	2015	929	78.8	78.8	3.4	12.0	5.5	0.3	0.0	80.2	77.5
Slovak Republic	2011	800	73.2	73.2	5.8	10.7	8.9	1.4	0.1	72.0	74.4
	2015	813	66.7	66.7	7.7	12.1	10.6	2.4	0.4	69.5	64.2
Slovenia	2011	642	79.9	79.9	5.5	5.5	7.4	1.4	0.3	79.8	80.0
	2015	624	80.7	80.7	5.9	3.6	7.1	2.4	0.3	83.5	78.2
Spain	2011	600	51.3	51.3	6.8	28.6	11.2	2.0	0.2	49.0	53.6
	2015	1112	55.4	55.4	6.2	20.8	12.5	4.6	0.5	57.0	53.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_04 (S051004): Life Science / Applying Type: MC Key: A
Label: Birds similar color as environment

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	73.6	73.6	3.2	5.4	14.1	3.0	0.6	71.8	75.5
	2015	599	71.7	71.7	3.7	7.8	10.9	5.4	0.5	78.4	65.0
Turkey	2011	1065	47.4	47.4	9.3	20.6	21.1	0.9	0.6	49.1	45.7
	2015	910	60.1	60.1	4.6	18.5	16.2	0.2	0.4	55.5	64.6
United Arab Emirates	2011	2104	44.8	44.8	10.2	26.0	14.8	3.1	1.2	42.8	46.8
	2015	3017	48.9	48.9	10.8	24.0	13.2	3.0	0.2	51.0	46.8
United States	2011	1800	79.3	79.3	2.3	9.2	6.1	1.8	1.3	77.4	81.2
	2015	1419	81.1	81.1	2.1	7.9	6.2	2.1	0.4	80.4	82.0

International Avg (n=40)	2011	30209	65.1	65.1	7.0	13.3	11.5	2.4	0.7	65.0	65.1
	2015	30625	68.3	68.3	5.8	11.8	10.8	2.6	0.6	69.2	67.5

Ontario, Canada	2011	671	74.5	74.5	3.6	9.5	8.9	2.0	1.5	76.1	72.8
	2015	651	71.0	71.0	2.9	7.0	14.3	3.0	1.8	71.1	70.9
Quebec, Canada	2011	599	69.3	69.3	5.1	6.8	16.0	2.1	0.6	67.9	70.8
	2015	392	72.1	72.1	3.8	6.0	13.3	2.6	2.2	78.0	65.9
Norway (4)	2011	450	56.5	56.5	9.0	10.8	18.8	2.2	2.7	54.7	58.4
	2015	587	60.1	60.1	7.8	11.8	16.9	2.6	0.8	60.7	59.5
Abu Dhabi, UAE	2011	601	41.0	41.0	10.4	28.0	15.9	3.4	1.3	36.3	45.7
	2015	713	42.4	42.4	13.9	25.8	13.3	4.0	0.6	46.0	38.9
Dubai, UAE	2011	872	53.2	53.2	6.6	24.0	12.2	3.0	1.0	51.1	55.2
	2015	1060	64.1	64.1	6.2	17.3	10.5	1.7	0.1	65.8	62.5
Florida, US	2011	379	81.3	81.3	3.7	9.2	5.1	0.0	0.7	80.2	82.6
	2015	287	83.0	83.0	2.4	7.1	4.0	2.4	1.0	80.8	85.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_05Z (S051026Z): Life Science / Reasoning Type: CR 1 Point
Label: T/F about predator/prey (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	36.8	60.1	1.8	1.3	36.8	36.4	37.2
	2015	840	50.5	47.5	1.4	0.7	50.5	48.5	52.3
Bahrain	2011	575	24.5	70.1	3.9	1.4	24.5	21.3	28.0
	2015	592	29.7	65.8	3.2	1.3	29.7	30.8	28.6
Belgium (Flemish)	2011	704	37.0	61.2	1.3	0.5	37.0	32.9	41.0
	2015	775	40.5	55.2	3.8	0.5	40.5	34.8	45.9
Chile	2011	790	33.9	58.2	5.2	2.7	33.9	29.0	38.4
	2015	678	33.7	57.1	5.3	3.9	33.7	27.3	40.1
Chinese Taipei	2011	613	50.2	49.2	0.6	0.0	50.2	45.0	54.8
	2015	606	55.0	44.3	0.7	0.0	55.0	50.4	59.0
Croatia	2011	646	28.8	69.0	2.0	0.2	28.8	23.3	34.4
	2015	565	38.9	59.5	1.5	0.1	38.9	33.8	43.9
Czech Republic	2011	662	21.6	75.1	3.1	0.1	21.6	17.3	25.6
	2015	731	23.8	73.8	2.0	0.3	23.8	20.0	27.7
Denmark	2011	563	38.1	54.8	5.0	2.1	38.1	37.6	38.7
	2015	533	38.9	56.5	2.7	1.9	38.9	39.1	38.7
England	2011	482	38.3	58.4	2.1	1.3	38.3	33.1	42.7
	2015	569	50.6	48.2	0.7	0.4	50.6	46.3	54.5
Finland	2011	667	47.0	52.4	0.5	0.1	47.0	48.0	46.1
	2015	720	40.0	58.6	0.8	0.5	40.0	39.0	41.0
Georgia	2011	678	16.9	69.9	12.5	0.7	16.9	14.5	19.2
	2015	562	23.4	63.6	11.6	1.4	23.4	23.8	22.9
Germany	2011	569	39.4	58.1	1.8	0.7	39.4	37.6	41.2
	2015	564	42.1	55.7	2.0	0.2	42.1	36.8	46.5
Hong Kong SAR	2011	575	39.4	59.6	0.6	0.4	39.4	34.5	43.7
	2015	507	41.0	58.7	0.3	0.0	41.0	38.1	43.0
Hungary	2011	731	39.6	55.8	3.2	1.4	39.6	38.7	40.5
	2015	725	42.4	53.2	3.5	0.9	42.4	35.7	49.3
Iran, Islamic Rep. of	2011	823	24.3	70.4	3.7	1.7	24.3	23.0	25.5
	2015	547	20.1	73.7	3.7	2.5	20.1	18.1	22.0
Ireland	2011	647	39.5	58.5	1.7	0.3	39.5	33.8	45.4
	2015	620	46.9	52.4	0.3	0.3	46.9	39.6	53.1
Italy	2011	605	41.9	55.7	1.1	1.3	41.9	35.0	48.1
	2015	633	38.1	59.9	1.1	0.8	38.1	36.0	40.0
Japan	2011	627	51.6	46.7	0.9	0.8	51.6	49.4	53.7
	2015	628	54.5	43.3	1.3	0.9	54.5	53.3	55.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_05Z (S051026Z): Life Science / Reasoning Type: CR 1 Point
Label: T/F about predator/prey (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	13.7	81.4	3.3	1.6	13.7	14.1	13.3
	2015	676	32.2	66.6	0.7	0.5	32.2	31.1	33.5
Korea, Rep. of	2011	625	63.4	36.4	0.2	0.0	63.4	61.3	65.3
	2015	669	56.0	43.6	0.3	0.1	56.0	56.0	56.0
Kuwait	2011	570	11.3	72.2	14.8	1.7	11.3	11.2	11.4
	2015	499	11.4	77.5	9.1	2.0	11.4	9.9	13.3
Lithuania	2011	664	35.8	61.9	2.2	0.0	35.8	33.4	38.2
	2015	657	33.9	64.8	1.1	0.1	33.9	27.4	40.2
Morocco	2011	1024	12.1	63.8	22.4	1.7	12.1	11.7	12.5
	2015	714	16.7	72.3	8.7	2.4	16.7	11.6	21.4
Netherlands	2011	454	51.0	47.7	1.1	0.2	51.0	49.0	53.2
	2015	654	50.3	48.4	1.0	0.4	50.3	46.2	54.1
New Zealand	2011	788	38.0	57.8	2.3	1.9	38.0	34.5	41.4
	2015	904	42.6	53.3	3.2	0.9	42.6	42.0	43.2
Northern Ireland	2011	516	46.8	52.0	1.1	0.1	46.8	41.2	53.2
	2015	421	45.7	54.1	0.2	0.0	45.7	39.7	50.3
Oman	2011	1491	11.2	73.7	13.0	2.1	11.2	9.5	13.0
	2015	1263	16.7	77.6	4.8	0.9	16.7	16.2	17.3
Portugal	2011	572	41.0	57.7	0.9	0.4	41.0	36.9	45.1
	2015	659	36.8	61.5	0.7	1.0	36.8	34.4	39.2
Qatar	2011	585	21.1	66.9	10.9	1.1	21.1	18.1	23.8
	2015	739	23.5	65.8	9.8	0.9	23.5	20.8	26.3
Russian Federation	2011	626	28.9	69.6	1.4	0.1	28.9	30.4	27.4
	2015	706	37.7	59.9	1.8	0.6	37.7	32.5	42.6
Saudi Arabia	2011	495	17.1	77.5	4.8	0.6	17.1	17.4	16.8
	2015	616	15.5	73.4	8.7	2.4	15.5	15.9	15.1
Serbia	2011	622	28.8	67.4	2.9	0.9	28.8	23.5	34.1
	2015	583	24.5	71.7	3.3	0.6	24.5	22.2	26.5
Singapore	2011	906	39.1	60.5	0.3	0.1	39.1	38.9	39.3
	2015	929	43.9	56.0	0.1	0.0	43.9	41.2	46.3
Slovak Republic	2011	800	19.3	78.7	1.9	0.1	19.3	15.1	23.5
	2015	813	27.5	69.3	2.6	0.6	27.5	24.2	30.5
Slovenia	2011	644	37.7	59.0	3.1	0.3	37.7	33.1	41.5
	2015	624	37.4	60.9	1.4	0.4	37.4	33.0	41.1
Spain	2011	600	35.1	60.3	4.4	0.2	35.1	30.0	40.1
	2015	1112	40.7	56.0	2.5	0.8	40.7	36.2	44.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_05Z (S051026Z): Life Science / Reasoning Type: CR 1 Point
Label: T/F about predator/prey (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	681	37.7	60.1	1.1	1.0	37.7	32.0	43.2
	2015	599	44.1	53.6	1.5	0.8	44.1	41.8	46.5
Turkey	2011	1065	29.2	66.0	4.1	0.7	29.2	28.3	30.2
	2015	910	38.1	60.0	1.5	0.4	38.1	30.2	46.0
United Arab Emirates	2011	2104	20.3	74.9	3.4	1.4	20.3	17.0	23.6
	2015	3017	24.2	72.5	3.0	0.4	24.2	22.5	25.7
United States	2011	1800	50.8	46.8	0.8	1.6	50.8	48.6	53.1
	2015	1419	50.6	47.2	1.3	0.9	50.6	47.4	54.2

International Avg (n=40)	2011	30101	33.5	61.9	3.8	0.9	33.5	30.6	36.2
	2015	30578	36.5	59.8	2.8	0.8	36.5	33.3	39.5

Ontario, Canada	2011	671	46.4	49.8	1.7	2.1	46.4	45.1	47.7
	2015	651	51.6	43.4	2.4	2.6	51.6	49.3	53.9
Quebec, Canada	2011	599	40.5	57.5	1.3	0.6	40.5	37.8	43.4
	2015	394	45.3	51.0	1.4	2.3	45.3	45.2	45.4
Norway (4)	2011	450	37.9	56.4	2.8	2.8	37.9	37.4	38.5
	2015	587	40.7	55.4	2.6	1.4	40.7	37.2	44.0
Abu Dhabi, UAE	2011	601	17.2	77.1	4.3	1.4	17.2	13.8	20.6
	2015	713	21.9	72.9	4.2	1.0	21.9	20.4	23.4
Dubai, UAE	2011	872	22.3	74.8	1.8	1.1	22.3	17.5	26.6
	2015	1060	32.1	66.2	1.5	0.2	32.1	29.4	34.8
Florida, US	2011	379	47.5	50.9	0.9	0.7	47.5	45.7	49.7
	2015	287	49.7	47.6	1.3	1.4	49.7	47.7	51.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_06 (S051130): Physical Science / Reasoning Type: CR 1 Point
Label: Take salt out of birthday cake

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	18.4	11.1	66.8	2.0	1.7	29.5	36.5	22.5
	2015	841	14.7	6.0	75.6	2.6	1.1	20.7	25.3	16.5
Bahrain	2011	576	4.8	18.2	74.7	0.8	1.5	23.0	17.0	29.3
	2015	592	9.7	19.3	65.6	3.6	1.8	29.0	35.3	22.9
Belgium (Flemish)	2011	704	12.8	15.9	70.0	0.9	0.5	28.6	30.9	26.4
	2015	775	11.1	18.9	65.7	3.5	0.7	30.0	29.1	30.9
Chile	2011	790	5.8	6.0	82.1	2.8	3.2	11.8	13.5	10.2
	2015	678	6.3	7.0	76.8	5.9	3.9	13.3	13.0	13.6
Chinese Taipei	2011	613	11.8	20.8	66.4	1.0	0.0	32.6	35.5	30.0
	2015	606	2.3	20.1	76.3	1.4	0.0	22.3	24.7	20.3
Croatia	2011	646	15.5	15.5	67.5	1.4	0.2	31.0	35.8	26.1
	2015	565	9.5	19.9	69.2	1.2	0.2	29.3	31.3	27.4
Czech Republic	2011	662	11.0	16.2	68.1	4.4	0.4	27.2	29.4	25.1
	2015	731	14.6	11.4	72.6	1.0	0.3	26.0	28.3	23.9
Denmark	2011	563	21.3	11.2	61.2	2.9	3.4	32.6	36.2	28.8
	2015	533	19.2	14.0	61.0	2.6	3.2	33.2	41.4	24.9
England	2011	482	13.4	6.5	76.7	2.1	1.3	19.8	24.4	15.9
	2015	569	17.6	14.1	66.5	1.5	0.4	31.7	39.3	24.9
Finland	2011	667	3.0	14.0	82.2	0.5	0.3	17.0	15.7	18.3
	2015	720	7.4	11.4	79.0	1.4	0.8	18.8	18.8	18.8
Georgia	2011	678	13.0	14.2	65.2	6.6	1.0	27.1	32.4	22.3
	2015	562	7.5	9.0	78.0	3.3	2.2	16.4	22.5	10.3
Germany	2011	569	15.0	5.4	76.6	2.0	1.0	20.4	21.2	19.6
	2015	564	17.6	4.3	75.7	2.2	0.2	22.0	21.4	22.5
Hong Kong SAR	2011	575	3.0	27.8	67.7	1.1	0.4	30.8	38.3	24.1
	2015	507	5.5	18.5	75.6	0.3	0.0	24.1	32.8	18.0
Hungary	2011	731	21.3	10.4	65.1	1.4	1.8	31.6	31.8	31.5
	2015	725	23.1	14.5	57.7	3.4	1.3	37.6	42.2	32.9
Iran, Islamic Rep. of	2011	823	1.9	27.7	64.7	2.9	2.8	29.6	32.9	26.4
	2015	547	4.6	27.3	63.7	1.5	2.9	31.9	33.3	30.6
Ireland	2011	647	10.0	2.1	86.0	1.6	0.3	12.0	14.7	9.3
	2015	620	16.4	2.7	79.4	1.0	0.3	19.2	20.2	18.3
Italy	2011	605	4.0	12.8	79.2	2.3	1.8	16.8	16.2	17.3
	2015	633	5.4	10.6	79.7	3.2	1.1	16.0	14.7	17.3
Japan	2011	627	14.8	17.1	66.6	0.3	1.2	31.9	31.9	31.8
	2015	628	10.9	18.9	67.9	1.1	1.2	29.8	29.1	30.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_06 (S051130): Physical Science / Reasoning Type: CR 1 Point
Label: Take salt out of birthday cake

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	629	16.3	21.9	49.2	11.0	1.6	38.2	42.6	34.0
	2015	676	25.1	37.9	36.3	0.3	0.5	63.0	65.7	60.1
Korea, Rep. of	2011	625	5.2	15.6	78.5	0.7	0.0	20.8	21.9	19.7
	2015	669	4.5	14.7	79.9	0.8	0.1	19.2	20.6	17.8
Kuwait	2011	593	4.0	4.9	81.6	7.1	2.5	8.8	11.8	5.2
	2015	499	3.3	5.1	75.7	12.2	3.8	8.4	11.2	5.4
Lithuania	2011	664	8.6	25.8	64.4	0.9	0.3	34.4	32.8	36.1
	2015	657	8.3	30.2	60.7	0.6	0.2	38.5	39.8	37.3
Morocco	2011	1111	3.2	19.1	69.6	6.4	1.8	22.2	23.3	21.3
	2015	714	9.7	6.2	75.1	5.0	4.1	15.9	11.0	20.3
Netherlands	2011	454	10.6	15.9	72.4	0.7	0.4	26.5	25.4	27.9
	2015	654	11.2	9.0	78.0	1.3	0.5	20.2	24.1	16.5
New Zealand	2011	788	13.9	6.6	74.8	2.6	2.1	20.5	25.1	16.0
	2015	904	18.5	5.8	71.4	3.4	0.9	24.3	29.4	19.5
Northern Ireland	2011	516	9.8	3.8	83.9	2.4	0.1	13.6	17.6	9.2
	2015	432	22.1	1.9	73.6	1.6	0.7	24.0	25.9	22.7
Oman	2011	1491	2.7	8.3	82.3	3.9	2.7	11.1	12.3	9.8
	2015	1291	6.4	15.0	74.6	3.0	1.1	21.4	24.2	18.3
Portugal	2011	572	3.9	7.8	87.3	0.6	0.4	11.7	14.2	9.2
	2015	659	3.9	6.4	86.4	1.6	1.6	10.3	11.3	9.4
Qatar	2011	585	3.5	13.0	77.5	4.6	1.4	16.4	21.0	12.3
	2015	739	5.5	10.9	78.5	3.9	1.2	16.4	20.3	12.2
Russian Federation	2011	626	6.7	24.8	66.8	0.9	0.8	31.4	36.9	26.2
	2015	706	10.7	26.5	60.8	1.4	0.6	37.2	41.5	33.1
Saudi Arabia	2011	512	4.6	12.9	79.2	2.7	0.6	17.5	19.9	15.0
	2015	629	4.7	4.5	83.0	5.4	2.3	9.3	13.7	5.0
Serbia	2011	622	7.9	23.2	64.5	3.1	1.3	31.1	30.7	31.6
	2015	583	9.4	19.0	67.7	1.9	2.0	28.4	31.1	26.0
Singapore	2011	906	12.9	32.4	54.2	0.3	0.1	45.3	47.0	43.7
	2015	929	11.6	35.5	52.2	0.6	0.0	47.2	50.5	44.2
Slovak Republic	2011	800	9.8	20.6	67.8	1.6	0.2	30.4	30.9	29.9
	2015	813	9.8	19.7	68.1	1.6	0.8	29.4	32.2	27.1
Slovenia	2011	644	6.6	21.5	70.3	1.0	0.6	28.1	27.5	28.7
	2015	624	8.7	24.5	63.5	2.2	1.1	33.2	35.0	31.7
Spain	2011	600	2.0	5.0	88.8	3.5	0.6	7.1	6.8	7.3
	2015	1112	3.1	8.5	86.3	1.0	1.1	11.6	12.3	10.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_06 (S051130): Physical Science / Reasoning Type: CR 1 Point
Label: Take salt out of birthday cake

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	7.6	4.0	85.7	1.5	1.3	11.6	14.9	8.4
	2015	599	6.6	0.8	88.3	3.5	0.8	7.4	10.3	4.6
Turkey	2011	1065	6.4	15.5	75.3	1.8	1.0	21.9	23.5	20.4
	2015	910	4.6	11.1	83.3	0.5	0.4	15.7	18.1	13.4
United Arab Emirates	2011	2104	7.6	9.6	78.6	2.6	1.6	17.2	21.1	13.5
	2015	3017	9.1	11.7	75.6	3.2	0.5	20.7	22.9	18.6
United States	2011	1800	26.2	3.4	67.2	1.3	1.9	29.6	31.9	27.3
	2015	1419	25.3	4.2	67.6	1.8	1.2	29.4	32.3	26.3

International Avg (n=40)	2011	30229	9.5	14.2	72.7	2.5	1.2	23.7	25.8	21.7
	2015	30631	10.6	13.9	71.8	2.4	1.2	24.6	27.2	22.1

Ontario, Canada	2011	671	21.7	4.8	68.6	2.6	2.4	26.5	30.9	22.1
	2015	651	16.8	2.8	73.4	4.2	2.7	19.7	24.1	15.4
Quebec, Canada	2011	599	19.3	9.8	66.6	3.6	0.8	29.1	31.8	26.1
	2015	395	8.7	5.2	81.5	2.0	2.5	13.9	14.0	13.9
Norway (4)	2011	450	10.2	2.3	82.4	2.0	3.2	12.4	14.2	10.6
	2015	587	8.3	14.5	73.1	1.9	2.1	22.9	27.4	18.4
Abu Dhabi, UAE	2011	601	6.1	8.3	80.9	2.8	1.9	14.4	18.3	10.4
	2015	713	6.9	10.9	76.9	4.2	1.1	17.8	21.2	14.5
Dubai, UAE	2011	872	10.9	11.8	73.3	2.6	1.4	22.7	26.1	19.6
	2015	1060	15.5	17.2	65.2	1.9	0.2	32.7	35.4	30.1
Florida, US	2011	379	23.8	5.6	67.7	1.9	1.0	29.4	32.6	25.7
	2015	287	23.5	3.1	70.5	1.2	1.7	26.7	31.2	21.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_07 (S051114): Physical Science / Applying Type: MC Key: C
Label: Four objects sorted into groups

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	49.4	10.0	21.3	49.4	14.7	2.6	2.1	47.8	50.9
	2015	841	56.6	5.7	16.6	56.6	16.7	2.9	1.4	51.5	61.4
Bahrain	2011	576	38.0	18.6	25.4	38.0	14.6	1.9	1.5	35.7	40.4
	2015	592	34.7	19.0	26.1	34.7	16.2	2.3	1.8	35.2	34.1
Belgium (Flemish)	2011	703	47.5	6.7	32.9	47.5	9.0	3.3	0.5	50.0	45.1
	2015	775	41.1	7.6	31.6	41.1	12.2	6.9	0.7	42.0	40.2
Chile	2011	790	31.3	10.4	30.2	31.3	20.8	3.7	3.6	30.4	32.1
	2015	678	39.9	10.9	24.4	39.9	15.3	5.1	4.2	39.6	40.4
Chinese Taipei	2011	613	63.5	5.1	22.8	63.5	6.2	2.4	0.0	66.0	61.3
	2015	606	65.7	3.0	22.4	65.7	6.3	2.7	0.0	66.5	65.1
Croatia	2011	646	44.0	4.6	24.6	44.0	19.6	7.0	0.2	40.7	47.4
	2015	565	50.3	7.6	18.8	50.3	17.0	6.1	0.2	52.7	48.0
Czech Republic	2011	662	57.2	8.5	15.8	57.2	13.6	4.2	0.7	60.9	53.7
	2015	731	60.7	5.2	14.0	60.7	15.4	4.1	0.6	57.4	63.9
Denmark	2011	563	40.2	9.2	15.8	40.2	22.7	8.7	3.5	40.9	39.4
	2015	533	43.2	10.8	17.7	43.2	17.4	7.4	3.5	43.1	43.4
England	2011	482	61.9	4.3	17.5	61.9	12.3	2.7	1.3	58.3	65.1
	2015	569	66.3	4.7	13.3	66.3	12.9	2.0	0.8	73.7	59.7
Finland	2011	667	71.7	4.2	11.5	71.7	8.9	3.5	0.3	69.7	73.6
	2015	720	65.7	5.7	14.4	65.7	9.5	3.8	0.9	72.0	59.8
Georgia	2011	678	41.8	8.5	29.1	41.8	13.3	6.2	1.1	41.2	42.4
	2015	562	37.8	7.9	22.9	37.8	21.5	7.5	2.5	33.6	42.0
Germany	2011	569	45.7	7.7	27.2	45.7	10.3	8.0	1.0	41.4	49.9
	2015	564	44.7	4.6	24.3	44.7	16.0	10.2	0.4	46.4	43.3
Hong Kong SAR	2011	575	64.0	4.4	19.3	64.0	11.2	0.6	0.4	62.5	65.4
	2015	507	69.0	5.7	18.0	69.0	6.7	0.6	0.0	67.5	70.0
Hungary	2011	731	48.1	6.2	26.1	48.1	12.0	5.4	2.1	50.9	45.4
	2015	725	50.3	4.0	21.0	50.3	13.3	9.3	2.1	51.9	48.6
Iran, Islamic Rep. of	2011	823	32.8	12.1	21.4	32.8	25.1	5.6	3.0	32.7	32.9
	2015	547	26.1	12.4	23.5	26.1	28.6	6.1	3.2	24.8	27.2
Ireland	2011	647	47.3	7.6	23.8	47.3	18.7	2.3	0.3	42.5	52.2
	2015	620	55.5	9.4	17.0	55.5	16.2	1.5	0.3	54.1	56.8
Italy	2011	605	45.8	6.4	26.9	45.8	11.6	7.3	2.0	42.8	48.6
	2015	633	51.0	9.0	23.2	51.0	11.9	3.7	1.3	47.7	54.0
Japan	2011	627	56.2	4.6	23.5	56.2	10.7	3.8	1.2	54.7	57.8
	2015	628	56.1	2.4	22.2	56.1	12.5	5.7	1.2	60.8	51.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_07 (S051114): Physical Science / Applying Type: MC Key: C
Label: Four objects sorted into groups

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	37.3	18.9	22.7	37.3	16.4	3.2	1.6	34.2	40.3
	2015	676	59.4	10.7	13.6	59.4	15.0	0.9	0.5	60.9	57.8
Korea, Rep. of	2011	625	84.8	3.4	7.9	84.8	3.9	0.0	0.0	86.5	83.2
	2015	669	93.2	1.6	4.0	93.2	0.7	0.5	0.1	92.1	94.1
Kuwait	2011	583	34.4	20.0	23.5	34.4	13.1	6.7	2.4	35.8	32.5
	2015	498	29.9	24.7	21.6	29.9	9.1	10.8	4.0	27.7	32.7
Lithuania	2011	664	41.6	4.9	26.3	41.6	20.2	6.7	0.3	38.4	44.8
	2015	657	45.0	3.7	28.4	45.0	15.8	6.9	0.3	44.6	45.3
Morocco	2011	1085	27.2	21.8	28.4	27.2	10.5	9.9	2.1	24.7	29.3
	2015	717	31.1	14.0	27.0	31.1	18.9	4.7	4.4	33.3	29.0
Netherlands	2011	454	47.5	5.0	22.5	47.5	21.5	3.2	0.4	48.0	47.1
	2015	654	45.4	5.3	28.3	45.4	16.9	3.7	0.5	43.8	46.8
New Zealand	2011	787	45.4	13.8	19.8	45.4	16.3	2.3	2.3	39.3	51.4
	2015	903	49.9	10.6	19.5	49.9	15.6	3.5	0.9	46.9	52.8
Northern Ireland	2011	516	58.1	5.7	22.9	58.1	11.2	1.7	0.4	59.5	56.5
	2015	419	56.6	7.7	19.9	56.6	15.2	0.6	0.0	62.2	52.2
Oman	2011	1491	29.9	18.9	24.8	29.9	19.4	4.3	2.7	30.3	29.5
	2015	1289	32.7	14.8	25.0	32.7	23.4	3.0	1.2	34.4	30.8
Portugal	2011	572	47.8	12.1	23.4	47.8	14.6	1.7	0.4	47.1	48.6
	2015	659	48.6	6.9	26.6	48.6	12.9	2.9	2.1	48.2	48.9
Qatar	2011	585	37.3	14.4	27.0	37.3	17.2	2.7	1.4	37.4	37.1
	2015	739	38.4	17.1	22.5	38.4	14.9	5.7	1.4	39.5	37.2
Russian Federation	2011	626	58.1	7.3	21.7	58.1	8.6	3.5	0.9	60.2	56.0
	2015	706	59.9	4.8	20.3	59.9	8.4	5.9	0.7	58.8	60.9
Saudi Arabia	2011	509	31.6	18.1	26.2	31.6	21.7	1.9	0.6	29.6	33.7
	2015	625	30.9	19.9	24.5	30.9	18.3	3.5	2.9	29.5	32.2
Serbia	2011	622	50.0	5.7	24.7	50.0	10.4	7.6	1.5	52.5	47.5
	2015	583	46.9	4.7	21.3	46.9	14.4	10.5	2.2	51.0	43.2
Singapore	2011	906	84.5	3.3	9.0	84.5	3.1	0.1	0.1	87.4	81.7
	2015	929	88.9	2.6	5.5	88.9	2.6	0.5	0.0	91.0	87.0
Slovak Republic	2011	800	46.5	9.7	21.9	46.5	18.5	3.0	0.4	42.2	50.7
	2015	813	55.0	8.3	16.8	55.0	15.1	3.4	1.4	52.8	56.8
Slovenia	2011	635	42.5	12.9	23.1	42.5	16.5	4.3	0.6	39.6	45.0
	2015	624	57.6	8.4	15.3	57.6	13.9	3.6	1.2	56.7	58.5
Spain	2011	600	53.2	6.6	20.0	53.2	12.7	6.8	0.7	55.4	51.1
	2015	1112	51.6	7.8	22.7	51.6	11.5	4.8	1.7	47.4	55.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_07 (S051114): Physical Science / Applying Type: MC Key: C
Label: Four objects sorted into groups

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	39.8	10.4	23.9	39.8	18.8	5.6	1.5	38.1	41.5
	2015	599	48.6	9.5	18.1	48.6	16.9	6.0	0.9	47.7	49.5
Turkey	2011	1065	42.8	14.4	21.7	42.8	18.8	1.3	1.0	45.2	40.4
	2015	910	46.4	12.3	28.1	46.4	11.8	1.0	0.4	47.2	45.6
United Arab Emirates	2011	2104	36.4	15.1	27.7	36.4	15.8	3.1	1.9	36.9	36.0
	2015	3017	44.0	13.6	22.5	44.0	16.3	3.0	0.6	44.5	43.5
United States	2011	1800	56.6	8.0	17.7	56.6	14.4	1.3	2.0	53.9	59.3
	2015	1419	57.1	8.1	17.2	57.1	13.5	2.7	1.5	55.9	58.4

International Avg (n=40)	2011	30180	48.0	9.7	22.5	48.0	14.5	4.0	1.3	47.3	48.7
	2015	30613	50.8	8.8	20.5	50.8	14.2	4.4	1.3	50.9	50.7

Ontario, Canada	2011	671	65.8	4.4	14.8	65.8	9.5	2.5	3.1	64.9	66.6
	2015	650	61.4	6.9	12.9	61.4	11.5	4.0	3.3	59.3	63.4
Quebec, Canada	2011	599	45.3	4.3	31.2	45.3	14.1	3.8	1.4	45.3	45.2
	2015	384	48.2	8.5	19.4	48.2	15.6	5.8	2.6	48.1	48.2
Norway (4)	2011	450	40.2	10.3	15.1	40.2	25.6	5.0	3.9	36.5	44.1
	2015	587	43.2	9.1	11.0	43.2	28.9	5.4	2.5	38.9	47.3
Abu Dhabi, UAE	2011	601	33.1	16.8	29.7	33.1	15.4	2.9	2.1	35.3	30.8
	2015	713	37.5	18.6	22.8	37.5	16.8	2.9	1.4	38.2	36.8
Dubai, UAE	2011	872	44.6	10.9	21.4	44.6	18.2	3.3	1.6	45.4	43.9
	2015	1060	56.7	8.7	19.2	56.7	13.4	1.8	0.2	55.0	58.4
Florida, US	2011	379	58.1	8.2	18.2	58.1	13.7	0.7	1.0	57.8	58.5
	2015	287	61.1	7.8	17.0	61.1	10.1	1.9	2.0	65.5	56.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_08Z (S051121Z): Physical Science / Knowing Type: CR 1 Point
Label: Objects conductors (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	33.9	62.8	1.1	2.2	33.9	36.2	31.6
	2015	841	44.0	51.8	2.4	1.8	44.0	47.7	40.7
Bahrain	2011	576	48.6	46.8	3.1	1.5	48.6	46.3	51.0
	2015	592	42.7	53.4	2.2	1.8	42.7	47.3	38.2
Belgium (Flemish)	2011	704	34.4	63.9	0.9	0.8	34.4	36.8	32.2
	2015	775	49.9	47.7	1.4	1.1	49.9	50.8	48.9
Chile	2011	790	35.7	56.5	2.7	5.1	35.7	40.4	31.3
	2015	678	37.6	54.8	3.2	4.4	37.6	41.5	33.7
Chinese Taipei	2011	613	77.4	21.7	0.6	0.3	77.4	76.3	78.5
	2015	606	78.1	21.7	0.2	0.0	78.1	77.6	78.5
Croatia	2011	646	52.4	45.2	2.0	0.4	52.4	50.4	54.5
	2015	565	53.7	44.0	2.0	0.3	53.7	52.3	55.1
Czech Republic	2011	662	39.4	57.7	1.9	1.0	39.4	36.7	42.1
	2015	731	48.1	48.5	2.0	1.4	48.1	42.5	53.7
Denmark	2011	563	42.6	50.3	3.0	4.1	42.6	46.7	38.4
	2015	533	46.2	46.0	2.6	5.3	46.2	51.7	40.6
England	2011	482	59.8	36.4	2.3	1.5	59.8	64.3	55.9
	2015	569	60.4	37.3	1.1	1.3	60.4	60.2	60.6
Finland	2011	667	44.4	54.5	0.8	0.3	44.4	37.3	51.3
	2015	720	49.2	49.3	0.5	1.1	49.2	49.2	49.1
Georgia	2011	678	36.5	57.9	4.1	1.5	36.5	37.1	35.9
	2015	562	36.0	54.9	5.5	3.6	36.0	34.4	37.7
Germany	2011	569	59.1	38.8	0.9	1.2	59.1	61.9	56.5
	2015	564	61.8	35.2	2.1	0.9	61.8	66.8	57.3
Hong Kong SAR	2011	575	66.6	33.0	0.0	0.4	66.6	66.0	67.2
	2015	507	68.1	31.7	0.2	0.0	68.1	65.7	69.8
Hungary	2011	731	50.7	45.6	0.7	3.0	50.7	47.1	54.2
	2015	725	48.0	48.1	1.2	2.7	48.0	45.4	50.7
Iran, Islamic Rep. of	2011	823	46.0	48.1	2.3	3.7	46.0	42.3	49.5
	2015	547	43.5	49.1	3.1	4.2	43.5	45.2	42.0
Ireland	2011	647	40.5	57.6	1.1	0.9	40.5	42.2	38.8
	2015	620	42.8	55.8	0.8	0.6	42.8	42.9	42.6
Italy	2011	605	48.9	46.4	2.0	2.6	48.9	49.6	48.3
	2015	633	49.8	47.8	1.0	1.4	49.8	52.4	47.3
Japan	2011	627	72.7	25.7	0.3	1.3	72.7	74.4	70.9
	2015	628	78.0	20.4	0.4	1.2	78.0	79.1	77.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_08Z (S051121Z): Physical Science / Knowing Type: CR 1 Point
Label: Objects conductors (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	35.3	59.1	3.9	1.7	35.3	31.9	38.5
	2015	676	55.7	43.6	0.1	0.6	55.7	54.5	57.0
Korea, Rep. of	2011	625	69.4	30.6	0.0	0.0	69.4	67.5	71.1
	2015	669	55.4	44.3	0.2	0.1	55.4	61.9	49.3
Kuwait	2011	569	25.7	58.2	12.9	3.2	25.7	28.1	22.7
	2015	499	24.4	65.9	4.6	5.1	24.4	23.1	26.2
Lithuania	2011	664	32.8	65.8	0.7	0.7	32.8	27.2	38.3
	2015	657	47.0	51.8	0.6	0.6	47.0	45.6	48.4
Morocco	2011	1034	24.5	66.5	6.2	2.7	24.5	24.7	24.5
	2015	718	30.2	56.2	7.6	6.0	30.2	21.9	37.8
Netherlands	2011	454	43.8	54.6	1.1	0.4	43.8	47.7	39.3
	2015	654	53.0	45.2	0.8	1.0	53.0	60.1	46.4
New Zealand	2011	787	34.1	61.7	1.7	2.6	34.1	38.2	30.0
	2015	902	38.2	59.2	1.7	0.9	38.2	39.5	36.9
Northern Ireland	2011	516	48.1	50.0	1.5	0.4	48.1	50.0	46.0
	2015	413	45.9	54.1	0.0	0.0	45.9	49.9	42.9
Oman	2011	1492	36.8	49.9	10.5	2.8	36.8	39.4	34.1
	2015	1278	47.1	48.1	3.4	1.4	47.1	50.6	43.2
Portugal	2011	572	55.4	42.8	1.4	0.4	55.4	58.4	52.5
	2015	659	54.7	41.9	0.7	2.7	54.7	60.2	49.4
Qatar	2011	585	36.3	51.3	10.6	1.7	36.3	36.9	35.8
	2015	739	41.0	48.7	8.8	1.6	41.0	45.9	35.7
Russian Federation	2011	626	35.2	63.6	0.3	0.9	35.2	33.4	37.0
	2015	706	39.4	58.7	0.9	0.9	39.4	38.1	40.7
Saudi Arabia	2011	503	40.7	56.9	1.7	0.8	40.7	48.5	32.2
	2015	617	40.7	50.1	5.7	3.5	40.7	44.0	37.4
Serbia	2011	622	19.7	76.7	1.8	1.8	19.7	17.6	21.8
	2015	583	22.8	71.2	2.1	3.8	22.8	16.0	29.0
Singapore	2011	906	64.3	35.5	0.1	0.1	64.3	64.7	64.0
	2015	929	65.0	34.3	0.5	0.2	65.0	65.0	65.1
Slovak Republic	2011	800	55.2	42.9	1.4	0.5	55.2	51.4	58.9
	2015	813	60.9	36.8	0.9	1.4	60.9	61.5	60.4
Slovenia	2011	643	52.6	46.1	0.6	0.7	52.6	50.6	54.2
	2015	624	66.3	29.8	1.9	2.0	66.3	66.8	65.8
Spain	2011	600	49.5	47.8	1.6	1.1	49.5	46.8	52.2
	2015	1112	50.7	45.9	1.2	2.1	50.7	49.8	51.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_08Z (S051121Z): Physical Science / Knowing Type: CR 1 Point
Label: Objects conductors (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	38.6	58.7	0.8	1.9	38.6	39.2	38.1
	2015	599	52.1	44.3	2.0	1.6	52.1	57.5	47.0
Turkey	2011	1065	39.1	56.3	3.5	1.1	39.1	36.9	41.3
	2015	910	40.4	58.0	1.1	0.4	40.4	41.5	39.3
United Arab Emirates	2011	2104	39.5	56.0	2.5	2.0	39.5	39.6	39.4
	2015	3016	42.5	54.1	2.7	0.8	42.5	43.0	42.0
United States	2011	1800	51.3	44.9	1.6	2.2	51.3	53.4	49.2
	2015	1419	55.1	40.6	1.5	2.7	55.1	56.8	53.3

International Avg (n=40)	2011	30119	45.4	50.6	2.4	1.5	45.4	45.6	45.2
	2015	30588	49.2	47.0	2.0	1.8	49.2	50.1	48.2

Ontario, Canada	2011	671	36.2	58.5	1.6	3.8	36.2	37.4	34.9
	2015	648	37.6	55.3	2.2	4.9	37.6	39.0	36.3
Quebec, Canada	2011	599	44.2	52.2	2.3	1.4	44.2	47.7	40.4
	2015	392	53.5	41.2	0.5	4.9	53.5	58.6	48.0
Norway (4)	2011	450	30.1	63.7	2.2	4.0	30.1	32.0	28.1
	2015	587	37.9	54.9	3.3	3.9	37.9	40.3	35.6
Abu Dhabi, UAE	2011	601	38.9	54.9	3.9	2.3	38.9	41.0	36.8
	2015	713	38.5	56.6	3.2	1.7	38.5	39.6	37.5
Dubai, UAE	2011	872	40.8	56.1	1.4	1.7	40.8	41.3	40.5
	2015	1060	51.4	46.4	1.7	0.5	51.4	49.6	53.1
Florida, US	2011	379	46.9	51.9	0.0	1.2	46.9	44.8	49.4
	2015	287	52.8	41.1	2.9	3.1	52.8	54.9	50.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_09 (S051147): Physical Science / Knowing Type: CR 1 Point
Label: Marble rolls down the track

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	30.4	59.1	8.1	2.4	30.4	23.4	37.3
	2015	841	25.3	65.8	6.9	2.0	25.3	20.2	30.0
Bahrain	2011	576	28.4	60.0	9.9	1.8	28.4	27.6	29.2
	2015	592	20.4	67.2	10.6	1.9	20.4	23.6	17.2
Belgium (Flemish)	2011	704	30.8	61.8	6.4	1.0	30.8	31.6	30.0
	2015	775	29.3	61.2	8.4	1.1	29.3	31.1	27.6
Chile	2011	790	21.5	51.2	21.8	5.4	21.5	19.0	23.8
	2015	677	18.0	54.3	22.5	5.1	18.0	13.1	23.1
Chinese Taipei	2011	613	19.7	62.9	17.1	0.3	19.7	18.1	21.1
	2015	606	29.1	53.5	17.3	0.0	29.1	22.3	34.9
Croatia	2011	646	14.1	64.9	20.3	0.6	14.1	9.1	19.2
	2015	565	26.0	54.9	17.9	1.2	26.0	20.6	31.4
Czech Republic	2011	662	27.9	50.7	20.1	1.3	27.9	16.8	38.4
	2015	731	36.6	44.1	17.2	2.1	36.6	33.2	39.9
Denmark	2011	563	49.9	34.8	11.0	4.3	49.9	47.7	52.2
	2015	533	45.0	38.3	11.0	5.8	45.0	38.4	51.7
England	2011	482	43.7	45.2	8.8	2.3	43.7	34.0	52.0
	2015	569	34.9	57.0	6.3	1.7	34.9	29.4	39.8
Finland	2011	667	51.9	38.3	9.2	0.7	51.9	45.2	58.2
	2015	720	33.9	53.2	11.5	1.4	33.9	27.1	40.4
Georgia	2011	678	18.5	54.7	24.7	2.1	18.5	18.0	19.0
	2015	562	6.3	70.8	19.3	3.7	6.3	6.3	6.2
Germany	2011	569	28.7	55.1	15.0	1.2	28.7	23.9	33.3
	2015	564	32.2	51.9	14.1	1.8	32.2	26.8	36.6
Hong Kong SAR	2011	575	32.0	56.9	10.7	0.4	32.0	27.2	36.3
	2015	507	27.1	63.3	9.6	0.0	27.1	17.8	33.4
Hungary	2011	730	29.0	55.4	12.3	3.4	29.0	24.9	33.0
	2015	725	28.5	53.6	15.2	2.7	28.5	24.3	32.7
Iran, Islamic Rep. of	2011	823	31.0	46.7	17.9	4.4	31.0	29.3	32.6
	2015	547	7.5	73.0	13.4	6.1	7.5	5.9	9.0
Ireland	2011	647	32.2	57.0	9.9	0.9	32.2	25.1	39.3
	2015	620	31.3	63.6	4.3	0.8	31.3	21.6	39.5
Italy	2011	605	15.6	52.0	29.7	2.6	15.6	14.7	16.4
	2015	633	14.9	55.0	28.0	2.1	14.9	11.6	18.1
Japan	2011	627	24.1	60.7	13.5	1.7	24.1	22.0	26.3
	2015	628	23.3	61.0	14.5	1.2	23.3	18.7	27.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_09 (S051147): Physical Science / Knowing Type: CR 1 Point
Label: Marble rolls down the track

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	18.6	64.6	14.2	2.7	18.6	18.6	18.7
	2015	676	59.6	33.6	6.2	0.6	59.6	61.6	57.5
Korea, Rep. of	2011	625	26.9	67.7	5.4	0.0	26.9	24.2	29.3
	2015	669	36.8	58.8	4.3	0.1	36.8	37.5	36.2
Kuwait	2011	593	20.6	43.8	31.8	3.8	20.6	25.8	14.3
	2015	499	15.7	34.9	43.9	5.6	15.7	14.6	17.0
Lithuania	2011	664	19.0	64.2	15.8	1.0	19.0	16.4	21.6
	2015	657	22.8	62.8	13.8	0.6	22.8	21.5	24.0
Morocco	2011	1111	9.1	43.2	43.8	4.0	9.1	8.9	9.2
	2015	718	12.3	49.3	31.0	7.4	12.3	9.7	14.8
Netherlands	2011	454	39.5	57.0	2.9	0.7	39.5	34.8	45.4
	2015	654	39.3	53.5	5.6	1.5	39.3	38.9	39.7
New Zealand	2011	788	27.6	62.5	7.3	2.7	27.6	23.1	32.0
	2015	903	27.4	60.5	10.9	1.3	27.4	20.8	33.7
Northern Ireland	2011	516	31.7	57.5	10.1	0.7	31.7	27.3	36.6
	2015	432	28.7	60.8	9.3	1.2	28.7	24.6	31.8
Oman	2011	1492	7.7	55.5	33.3	3.5	7.7	8.8	6.6
	2015	1293	13.5	59.7	25.3	1.6	13.5	14.8	12.0
Portugal	2011	572	18.9	67.4	12.0	1.7	18.9	14.2	23.6
	2015	659	14.3	68.6	13.4	3.7	14.3	13.0	15.6
Qatar	2011	585	15.9	59.0	22.9	2.2	15.9	19.5	12.6
	2015	739	10.9	66.2	20.4	2.4	10.9	10.9	10.9
Russian Federation	2011	626	32.5	55.9	10.7	0.9	32.5	36.1	29.2
	2015	706	52.6	37.4	8.9	1.1	52.6	50.8	54.2
Saudi Arabia	2011	512	21.8	62.2	15.3	0.8	21.8	25.7	17.6
	2015	629	24.5	48.7	23.2	3.5	24.5	29.6	19.6
Serbia	2011	622	16.8	68.4	12.3	2.6	16.8	16.3	17.2
	2015	583	19.8	62.1	13.9	4.2	19.8	13.0	26.0
Singapore	2011	906	29.7	66.7	3.5	0.1	29.7	26.6	32.5
	2015	929	28.0	69.2	2.6	0.2	28.0	23.3	32.1
Slovak Republic	2011	800	43.1	44.2	11.8	0.9	43.1	35.8	50.4
	2015	813	42.5	42.3	13.3	1.8	42.5	40.5	44.3
Slovenia	2011	644	10.1	67.7	21.3	0.9	10.1	8.0	12.0
	2015	624	15.4	63.8	18.5	2.3	15.4	14.9	15.8
Spain	2011	600	28.0	55.9	14.6	1.4	28.0	26.4	29.7
	2015	1112	25.3	57.9	14.4	2.4	25.3	19.8	30.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_09 (S051147): Physical Science / Knowing Type: CR 1 Point
Label: Marble rolls down the track

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	681	38.1	46.5	13.3	2.0	38.1	29.4	46.6
	2015	599	45.9	39.8	11.3	3.0	45.9	41.4	50.5
Turkey	2011	1066	5.7	84.1	8.3	1.9	5.7	5.9	5.4
	2015	910	6.3	83.3	9.9	0.5	6.3	5.5	7.1
United Arab Emirates	2011	2104	21.4	52.8	23.2	2.5	21.4	21.0	21.9
	2015	3017	23.1	53.3	22.5	1.0	23.1	22.1	24.0
United States	2011	1800	43.7	49.3	4.5	2.5	43.7	39.4	48.0
	2015	1419	39.1	53.2	4.6	3.2	39.1	33.9	44.8

International Avg (n=40)	2011	30230	26.4	56.6	15.1	1.9	26.4	23.7	28.9
	2015	30635	26.8	56.5	14.4	2.2	26.8	23.9	29.5

Ontario, Canada	2011	671	42.1	47.4	6.5	4.0	42.1	38.6	45.6
	2015	651	36.6	50.4	7.2	5.7	36.6	32.9	40.1
Quebec, Canada	2011	599	16.3	74.3	7.6	1.8	16.3	14.3	18.5
	2015	395	18.1	66.2	10.9	4.8	18.1	14.5	22.0
Norway (4)	2011	450	33.5	46.8	14.4	5.3	33.5	26.1	41.4
	2015	587	27.6	48.0	18.9	5.5	27.6	21.7	33.3
Abu Dhabi, UAE	2011	601	15.7	59.6	21.7	2.9	15.7	14.8	16.6
	2015	713	19.9	51.5	26.8	1.8	19.9	20.9	18.9
Dubai, UAE	2011	872	24.3	53.5	19.7	2.4	24.3	22.6	25.9
	2015	1060	29.6	57.0	12.3	1.1	29.6	24.5	34.4
Florida, US	2011	379	43.7	50.7	3.5	2.1	43.7	41.0	46.8
	2015	287	36.3	54.9	4.8	3.9	36.3	36.5	36.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S03_10 (S051105): Earth Science / Knowing Type: MC Key: A
Label: Water on sidewalk

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	71.1	71.1	4.3	8.3	11.4	1.6	3.3	70.7	71.5
	2015	841	72.5	72.5	6.0	8.4	9.3	1.5	2.2	73.7	71.4
Bahrain	2011	576	70.1	70.1	6.3	5.9	12.9	2.2	2.6	72.9	67.2
	2015	592	66.9	66.9	8.2	8.0	12.6	1.9	2.3	71.8	62.1
Belgium (Flemish)	2011	704	78.7	78.7	3.3	7.0	8.9	0.9	1.1	79.1	78.4
	2015	775	81.3	81.3	3.5	6.1	6.8	1.1	1.2	79.9	82.6
Chile	2011	790	37.5	37.5	14.2	11.1	29.7	1.6	5.9	34.6	40.3
	2015	678	39.6	39.6	17.2	10.2	24.7	2.8	5.5	41.9	37.2
Chinese Taipei	2011	613	89.7	89.7	0.9	4.0	4.3	0.8	0.3	89.0	90.3
	2015	606	94.9	94.9	0.5	0.6	3.2	0.8	0.0	94.6	95.2
Croatia	2011	646	77.5	77.5	5.1	6.7	8.8	1.3	0.6	77.7	77.4
	2015	565	78.6	78.6	6.5	5.0	7.2	1.6	1.2	76.6	80.5
Czech Republic	2011	662	64.2	64.2	2.8	12.4	17.5	1.6	1.5	66.5	61.9
	2015	731	61.3	61.3	5.3	8.6	19.5	1.8	3.4	61.0	61.7
Denmark	2011	563	52.7	52.7	7.4	12.5	19.2	3.3	4.9	48.1	57.5
	2015	533	49.6	49.6	9.7	16.6	13.7	3.6	6.8	49.5	49.7
England	2011	482	78.3	78.3	4.5	5.2	7.5	1.7	2.7	77.7	78.9
	2015	569	67.7	67.7	10.6	9.4	9.1	1.1	2.0	70.0	65.7
Finland	2011	667	87.9	87.9	2.8	3.6	3.6	0.7	1.4	89.1	86.6
	2015	720	85.8	85.8	2.4	4.5	4.1	0.7	2.5	87.3	84.3
Georgia	2011	678	64.8	64.8	7.6	6.9	16.4	1.3	2.9	64.7	64.8
	2015	562	62.0	62.0	8.0	6.2	16.6	2.0	5.1	58.5	65.6
Germany	2011	569	68.9	68.9	4.8	9.3	13.6	1.9	1.6	73.1	64.8
	2015	564	62.0	62.0	5.7	10.5	16.5	3.0	2.4	63.7	60.4
Hong Kong SAR	2011	575	85.9	85.9	2.5	6.0	4.7	0.2	0.7	88.2	83.8
	2015	507	88.0	88.0	2.9	5.4	2.7	1.1	0.0	88.3	87.8
Hungary	2011	731	62.6	62.6	5.3	3.4	22.2	2.7	3.8	61.2	64.0
	2015	725	62.0	62.0	3.2	3.0	24.4	3.8	3.6	61.0	63.0
Iran, Islamic Rep. of	2011	823	55.9	55.9	14.4	8.4	13.4	2.7	5.2	51.4	60.2
	2015	547	46.2	46.2	15.0	8.7	17.5	6.1	6.5	43.3	48.9
Ireland	2011	647	70.0	70.0	5.6	8.6	13.9	0.9	1.0	73.1	66.9
	2015	620	77.2	77.2	5.4	8.0	8.2	0.3	0.9	74.9	79.1
Italy	2011	605	52.7	52.7	9.3	13.1	19.2	2.7	3.0	52.3	53.1
	2015	633	50.8	50.8	11.6	14.2	18.1	2.5	2.7	49.0	52.5
Japan	2011	627	90.5	90.5	0.2	4.2	2.8	0.4	1.9	92.8	88.2
	2015	628	88.2	88.2	0.2	5.4	3.4	1.6	1.3	88.9	87.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_10 (S051105): Earth Science / Knowing Type: MC Key: A
Label: Water on sidewalk

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	41.9	41.9	2.0	3.4	49.0	0.9	2.8	41.0	42.8
	2015	676	73.1	73.1	2.5	1.5	21.2	0.6	1.1	77.1	69.0
Korea, Rep. of	2011	625	88.3	88.3	1.0	6.7	4.0	0.0	0.0	88.1	88.6
	2015	669	96.2	96.2	0.3	1.7	1.5	0.2	0.1	95.5	96.9
Kuwait	2011	586	55.2	55.2	13.8	8.2	12.7	5.3	4.8	58.6	51.0
	2015	499	54.2	54.2	13.4	7.0	12.3	5.2	7.9	53.7	55.5
Lithuania	2011	664	46.7	46.7	4.5	14.6	30.9	2.0	1.3	48.1	45.3
	2015	657	54.0	54.0	3.9	12.0	28.2	1.1	0.8	56.0	52.0
Morocco	2011	1093	44.4	44.4	17.5	12.7	13.9	6.7	4.8	44.6	44.3
	2015	718	51.8	51.8	13.7	9.8	13.0	3.1	8.6	50.1	53.4
Netherlands	2011	454	58.6	58.6	8.2	18.7	13.0	0.8	0.7	57.4	60.5
	2015	654	60.7	60.7	8.9	16.5	10.2	1.5	2.3	62.3	59.2
New Zealand	2011	788	68.4	68.4	5.3	6.8	14.0	2.4	3.2	67.9	69.0
	2015	903	71.6	71.6	7.5	7.2	9.7	2.1	1.9	74.0	69.3
Northern Ireland	2011	516	73.2	73.2	8.3	5.1	10.7	1.1	1.6	73.7	72.6
	2015	419	71.7	71.7	7.1	9.3	11.9	0.0	0.0	69.3	73.6
Oman	2011	1492	57.1	57.1	11.7	7.6	16.6	2.9	4.1	60.7	53.3
	2015	1286	65.5	65.5	12.3	7.3	11.6	1.8	1.5	70.0	60.5
Portugal	2011	572	75.8	75.8	5.0	5.5	10.3	0.9	2.5	74.8	76.8
	2015	659	74.0	74.0	7.9	3.8	9.0	1.0	4.3	72.2	75.7
Qatar	2011	585	61.2	61.2	14.9	7.2	12.5	1.8	2.3	62.3	60.2
	2015	739	64.0	64.0	11.8	4.6	14.1	2.4	3.0	70.3	57.4
Russian Federation	2011	626	78.6	78.6	3.9	6.0	8.9	1.0	1.6	79.8	77.4
	2015	706	82.5	82.5	3.4	5.2	5.6	2.0	1.2	82.5	82.5
Saudi Arabia	2011	511	68.7	68.7	10.9	6.6	12.0	0.5	1.3	77.9	59.0
	2015	626	62.3	62.3	10.7	8.1	12.3	2.7	3.9	66.3	58.4
Serbia	2011	622	67.5	67.5	2.8	4.4	19.4	2.7	3.0	69.8	65.2
	2015	583	69.0	69.0	3.0	4.5	14.0	4.6	5.0	70.6	67.4
Singapore	2011	906	85.9	85.9	5.2	4.7	3.9	0.2	0.1	85.7	86.1
	2015	929	87.4	87.4	5.9	2.7	3.4	0.3	0.2	85.3	89.3
Slovak Republic	2011	800	89.4	89.4	0.6	2.0	5.4	1.4	1.2	88.7	90.2
	2015	813	86.4	86.4	2.4	2.2	5.3	1.6	2.0	85.9	86.8
Slovenia	2011	642	78.0	78.0	6.2	2.9	9.6	1.8	1.5	78.7	77.4
	2015	624	76.5	76.5	4.5	3.0	11.0	2.4	2.6	76.4	76.6
Spain	2011	600	83.8	83.8	3.7	2.7	6.8	1.3	1.8	83.4	84.2
	2015	1112	86.6	86.6	2.0	1.2	6.1	1.3	2.9	84.3	88.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_10 (S051105): Earth Science / Knowing Type: MC Key: A
Label: Water on sidewalk

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	682	64.8	64.8	2.9	10.3	17.8	1.5	2.5	62.9	66.7
	2015	599	75.2	75.2	3.7	6.7	8.7	2.6	3.0	77.9	72.6
Turkey	2011	1066	63.3	63.3	9.2	6.6	18.3	0.7	1.9	63.4	63.2
	2015	910	69.6	69.6	8.4	6.6	13.8	0.8	0.8	68.8	70.4
United Arab Emirates	2011	2104	65.9	65.9	11.4	5.6	12.5	1.9	2.8	68.1	63.7
	2015	3017	67.3	67.3	12.0	5.9	11.2	2.4	1.2	69.0	65.7
United States	2011	1800	83.1	83.1	3.2	3.2	6.1	1.8	2.6	83.4	82.7
	2015	1419	83.6	83.6	2.9	3.2	4.2	2.7	3.4	83.9	83.2

International Avg (n=40)	2011	30204	69.0	69.0	6.3	7.2	13.5	1.7	2.3	69.5	68.4
	2015	30613	70.4	70.4	6.8	6.7	11.4	2.0	2.7	70.9	70.0

Ontario, Canada	2011	671	73.3	73.3	4.3	5.8	10.0	1.9	4.6	76.8	69.9
	2015	651	73.6	73.6	4.7	6.4	7.1	2.0	6.2	75.4	71.8
Quebec, Canada	2011	599	63.0	63.0	6.8	11.1	15.0	2.1	2.0	61.0	65.2
	2015	394	61.1	61.1	3.8	11.0	16.8	0.7	6.6	62.2	59.9
Norway (4)	2011	450	41.1	41.1	5.8	14.2	32.1	1.2	5.5	34.5	48.2
	2015	587	47.3	47.3	7.5	13.6	23.5	2.3	5.7	44.1	50.5
Abu Dhabi, UAE	2011	601	61.2	61.2	11.9	7.6	13.9	2.2	3.1	65.2	57.2
	2015	713	58.5	58.5	14.0	8.0	14.8	2.9	1.8	63.5	53.8
Dubai, UAE	2011	872	75.2	75.2	7.1	3.2	9.8	2.0	2.8	75.5	74.8
	2015	1060	76.2	76.2	9.4	4.4	7.5	1.3	1.1	75.6	76.8
Florida, US	2011	379	87.0	87.0	3.6	1.1	5.9	0.3	2.1	89.4	84.2
	2015	287	81.7	81.7	4.1	3.5	3.8	2.2	4.7	79.3	84.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_l1 (S051110): Earth Science / Applying Type: MC Key: D
Label: What shellfish tell scientists

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	57.8	9.4	21.1	5.6	57.8	2.5	3.6	57.3	58.4
	2015	841	65.7	10.2	18.0	1.9	65.7	1.8	2.5	63.5	67.6
Bahrain	2011	576	47.0	12.5	28.7	6.6	47.0	2.4	2.7	48.9	45.0
	2015	592	47.7	14.1	25.7	7.4	47.7	2.5	2.6	49.2	46.1
Belgium (Flemish)	2011	704	45.1	13.8	31.0	7.5	45.1	1.2	1.4	43.9	46.2
	2015	775	43.8	13.8	31.3	6.8	43.8	2.8	1.5	45.7	42.1
Chile	2011	790	56.0	13.5	14.0	6.7	56.0	3.3	6.6	54.2	57.7
	2015	678	51.0	12.6	19.3	7.8	51.0	3.6	5.7	52.2	49.8
Chinese Taipei	2011	613	47.5	30.9	15.2	4.2	47.5	1.9	0.3	47.0	48.0
	2015	606	52.6	30.8	12.0	1.6	52.6	3.0	0.0	49.0	55.6
Croatia	2011	646	81.0	5.3	10.2	0.7	81.0	1.8	1.0	81.4	80.5
	2015	565	80.1	5.7	10.8	1.1	80.1	1.0	1.3	83.3	76.9
Czech Republic	2011	662	73.2	3.3	15.9	3.5	73.2	2.6	1.6	72.1	74.2
	2015	731	71.2	6.3	13.3	2.5	71.2	2.7	4.0	71.0	71.4
Denmark	2011	563	62.0	6.9	15.6	4.9	62.0	4.4	6.2	64.1	59.8
	2015	533	62.5	5.9	16.2	5.1	62.5	2.5	7.8	60.7	64.2
England	2011	482	63.9	11.0	14.6	5.3	63.9	2.1	3.0	65.8	62.3
	2015	569	66.9	10.5	16.4	3.1	66.9	1.1	2.0	67.9	66.0
Finland	2011	667	73.5	7.5	13.3	3.5	73.5	0.8	1.4	74.3	72.7
	2015	720	68.2	7.1	15.4	3.1	68.2	3.7	2.5	70.5	66.0
Georgia	2011	678	58.3	10.3	21.0	5.3	58.3	2.0	3.1	58.7	58.0
	2015	562	58.5	13.2	15.2	3.7	58.5	4.3	5.1	55.9	61.2
Germany	2011	569	59.5	10.3	20.8	4.8	59.5	3.1	1.6	57.9	60.9
	2015	564	55.8	14.2	20.1	2.8	55.8	4.2	2.8	55.8	56.0
Hong Kong SAR	2011	575	58.1	21.0	15.0	4.3	58.1	0.9	0.7	56.1	59.8
	2015	507	64.6	19.5	12.5	1.6	64.6	1.8	0.0	63.5	65.4
Hungary	2011	731	72.9	5.5	11.6	3.7	72.9	2.5	3.8	75.6	70.2
	2015	725	74.7	6.1	9.2	2.6	74.7	3.7	3.8	74.2	75.2
Iran, Islamic Rep. of	2011	823	55.7	8.4	15.4	9.8	55.7	5.0	5.7	55.3	56.1
	2015	547	54.1	9.9	15.7	8.1	54.1	3.7	8.5	58.2	50.3
Ireland	2011	647	60.9	13.7	16.9	6.0	60.9	1.3	1.2	57.7	64.0
	2015	620	67.2	11.8	17.5	1.5	67.2	0.9	1.0	64.3	69.6
Italy	2011	605	75.1	5.8	12.0	2.3	75.1	1.8	3.0	75.6	74.8
	2015	633	74.0	5.3	12.9	3.5	74.0	1.4	2.8	72.0	76.0
Japan	2011	627	87.6	3.5	4.8	1.5	87.6	0.7	1.9	86.7	88.6
	2015	628	89.7	3.4	3.3	0.1	89.7	2.1	1.3	88.8	90.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_l1 (S051110): Earth Science / Applying Type: MC Key: D
Label: What shellfish tell scientists

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	64.3	10.5	16.6	4.5	64.3	1.3	2.8	68.5	60.4
	2015	676	76.4	6.3	13.0	2.2	76.4	0.8	1.3	75.5	77.4
Korea, Rep. of	2011	625	86.0	9.3	4.4	0.3	86.0	0.0	0.0	84.8	87.0
	2015	669	73.5	15.0	9.7	0.9	73.5	0.6	0.3	68.9	77.8
Kuwait	2011	585	18.9	14.9	39.1	14.8	18.9	6.4	5.9	19.8	17.7
	2015	498	25.1	20.5	22.4	10.9	25.1	12.1	9.0	29.2	20.9
Lithuania	2011	664	55.0	9.5	24.6	6.6	55.0	2.8	1.6	56.7	53.3
	2015	657	59.2	11.4	23.8	3.5	59.2	1.0	1.0	60.5	57.9
Morocco	2011	1093	21.7	20.5	31.7	13.9	21.7	6.7	5.4	22.3	21.2
	2015	718	32.9	15.2	23.3	14.3	32.9	5.6	8.6	34.7	31.3
Netherlands	2011	454	62.3	15.9	13.8	5.2	62.3	2.1	0.7	62.6	62.5
	2015	654	55.2	17.2	17.2	7.1	55.2	0.8	2.4	57.0	53.6
New Zealand	2011	788	58.3	10.3	21.3	4.5	58.3	1.6	4.0	59.8	56.8
	2015	903	61.9	10.8	17.5	4.4	61.9	3.3	2.1	62.1	61.8
Northern Ireland	2011	516	67.2	8.3	17.7	4.0	67.2	1.1	1.7	68.7	65.6
	2015	420	72.2	10.8	13.0	3.7	72.2	0.3	0.0	68.8	74.8
Oman	2011	1491	37.0	17.0	25.0	12.5	37.0	4.1	4.4	41.5	32.2
	2015	1290	38.8	15.0	29.3	12.0	38.8	3.0	1.9	41.5	35.9
Portugal	2011	572	56.1	13.4	23.7	3.7	56.1	0.3	2.8	56.5	55.7
	2015	659	55.1	9.5	22.2	6.0	55.1	2.1	5.1	53.6	56.5
Qatar	2011	585	39.2	18.4	26.0	10.4	39.2	3.6	2.4	40.2	38.4
	2015	739	44.2	14.4	24.1	9.9	44.2	3.9	3.5	49.6	38.3
Russian Federation	2011	626	84.7	1.8	8.9	1.7	84.7	1.2	1.6	89.3	80.3
	2015	706	80.9	2.7	10.7	2.6	80.9	1.5	1.5	80.1	81.7
Saudi Arabia	2011	510	41.8	23.1	24.0	8.3	41.8	1.7	1.3	46.1	37.2
	2015	627	28.4	17.5	27.5	15.0	28.4	7.5	4.1	36.2	20.7
Serbia	2011	622	49.9	10.7	29.2	3.8	49.9	3.1	3.3	52.4	47.4
	2015	583	49.0	10.7	24.4	3.4	49.0	5.1	7.4	48.3	49.8
Singapore	2011	906	63.2	14.7	18.2	2.8	63.2	0.9	0.3	63.9	62.5
	2015	929	66.5	10.4	19.0	3.2	66.5	0.7	0.2	66.4	66.5
Slovak Republic	2011	800	65.3	7.4	21.3	3.4	65.3	1.2	1.5	62.6	67.9
	2015	813	60.8	8.7	22.2	3.2	60.8	2.6	2.4	62.6	59.2
Slovenia	2011	641	57.4	8.2	26.3	3.9	57.4	1.8	2.3	59.1	56.0
	2015	624	62.8	9.3	20.8	2.0	62.8	2.4	2.7	65.5	60.5
Spain	2011	600	66.0	8.7	17.8	4.6	66.0	1.1	1.8	65.7	66.2
	2015	1112	68.5	9.9	10.9	5.2	68.5	2.0	3.5	63.8	72.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_l1 (S051110): Earth Science / Applying Type: MC Key: D
Label: What shellfish tell scientists

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	681	67.4	4.4	19.9	3.4	67.4	2.2	2.6	69.3	65.6
	2015	599	66.0	5.1	19.0	4.4	66.0	1.8	3.6	67.1	64.8
Turkey	2011	1066	49.3	19.7	14.3	13.0	49.3	1.7	2.0	51.6	46.9
	2015	910	56.3	15.9	15.1	10.5	56.3	1.1	1.0	54.8	57.9
United Arab Emirates	2011	2104	39.2	16.3	30.3	8.4	39.2	2.9	3.0	40.8	37.5
	2015	3017	42.7	15.1	29.6	8.0	42.7	3.1	1.5	43.9	41.7
United States	2011	1800	67.1	9.2	17.4	3.2	67.1	0.5	2.6	67.5	66.8
	2015	1419	62.7	10.2	19.3	2.1	62.7	1.6	4.1	65.3	59.9

International Avg (n=40)	2011	30199	58.8	11.6	19.2	5.6	58.8	2.2	2.6	59.6	58.1
	2015	30618	59.7	11.6	18.0	5.0	59.7	2.7	3.1	60.0	59.3

Ontario, Canada	2011	671	60.3	9.7	19.4	3.1	60.3	2.1	5.4	63.2	57.3
	2015	651	59.0	9.3	19.8	3.2	59.0	1.9	6.7	59.7	58.4
Quebec, Canada	2011	599	51.9	7.7	29.5	7.0	51.9	1.9	2.0	50.4	53.4
	2015	395	53.3	7.7	25.1	4.6	53.3	2.6	6.7	54.6	52.0
Norway (4)	2011	450	57.3	11.4	18.2	4.8	57.3	2.7	5.5	55.3	59.5
	2015	587	57.5	13.0	16.3	4.6	57.5	2.7	5.9	61.3	53.9
Abu Dhabi, UAE	2011	601	32.5	15.5	35.0	11.1	32.5	2.2	3.7	37.6	27.4
	2015	713	37.4	16.3	30.8	9.1	37.4	4.3	2.2	37.9	37.0
Dubai, UAE	2011	872	50.8	14.4	24.2	5.5	50.8	2.3	2.8	51.6	50.1
	2015	1060	54.4	12.1	25.2	4.4	54.4	2.3	1.5	55.7	53.2
Florida, US	2011	379	60.5	8.1	22.9	5.7	60.5	0.7	2.1	63.4	57.0
	2015	287	61.7	9.6	19.4	2.4	61.7	1.7	5.1	62.4	61.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S03_l2 (S051111): Earth Science / Applying Type: MC Key: B
Label: Shadow of tree at different times

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	882	65.6	3.7	65.6	17.9	7.7	1.4	3.7	61.6	69.7
	2015	841	69.8	2.8	69.8	16.3	7.5	1.1	2.6	66.3	73.0
Bahrain	2011	576	51.7	11.9	51.7	14.9	16.7	1.7	3.1	54.0	49.3
	2015	592	52.1	11.2	52.1	16.2	15.8	0.7	4.0	55.4	48.8
Belgium (Flemish)	2011	704	59.4	6.6	59.4	19.1	13.1	0.1	1.6	54.9	63.7
	2015	775	61.8	5.4	61.8	18.4	10.8	1.6	2.1	58.2	65.2
Chile	2011	790	51.7	7.9	51.7	24.0	7.7	0.7	8.0	43.7	59.2
	2015	678	58.4	8.8	58.4	18.6	5.5	1.7	6.9	56.1	60.7
Chinese Taipei	2011	613	85.4	4.0	85.4	4.5	5.6	0.2	0.3	78.0	92.0
	2015	606	82.8	4.1	82.8	7.7	4.2	1.0	0.2	77.5	87.2
Croatia	2011	646	70.9	5.1	70.9	11.1	10.7	0.8	1.3	66.3	75.7
	2015	565	74.1	4.0	74.1	11.3	8.2	0.4	2.0	73.0	75.3
Czech Republic	2011	662	64.8	9.2	64.8	14.4	7.4	1.5	2.7	61.6	67.8
	2015	731	61.3	7.4	61.3	15.9	8.7	1.5	5.1	56.8	65.7
Denmark	2011	563	66.6	4.8	66.6	12.8	6.7	2.2	7.0	59.0	74.4
	2015	533	67.3	5.4	67.3	14.1	4.2	1.0	8.0	61.0	73.6
England	2011	482	66.6	5.7	66.6	14.1	7.7	2.2	3.8	66.0	67.0
	2015	569	68.3	4.7	68.3	17.1	6.8	0.8	2.3	68.2	68.4
Finland	2011	667	74.4	3.4	74.4	15.0	4.7	0.8	1.7	67.2	81.4
	2015	720	76.6	3.7	76.6	9.3	3.6	2.9	3.8	74.5	78.7
Georgia	2011	678	54.7	6.1	54.7	12.0	21.3	1.6	4.2	51.8	57.4
	2015	562	55.3	9.2	55.3	16.4	11.5	1.5	6.1	48.1	62.5
Germany	2011	569	58.4	8.5	58.4	18.8	10.0	2.4	1.8	53.3	63.3
	2015	564	58.7	8.2	58.7	19.0	6.7	3.3	4.1	51.5	64.8
Hong Kong SAR	2011	575	75.0	6.4	75.0	10.6	7.1	0.1	0.7	72.7	77.1
	2015	507	79.9	4.8	79.9	9.0	5.0	1.3	0.0	73.9	84.0
Hungary	2011	731	68.1	6.4	68.1	11.2	8.9	1.0	4.4	63.0	73.2
	2015	725	65.7	6.6	65.7	13.7	6.4	2.3	5.3	60.5	71.0
Iran, Islamic Rep. of	2011	823	44.3	17.0	44.3	13.0	17.3	1.5	7.0	40.1	48.2
	2015	547	45.4	14.7	45.4	14.4	12.4	3.5	9.6	40.0	50.5
Ireland	2011	647	55.1	8.2	55.1	21.9	12.7	0.7	1.4	49.9	60.5
	2015	620	64.8	6.3	64.8	18.2	8.4	1.0	1.3	58.8	69.9
Italy	2011	605	65.2	5.1	65.2	13.1	10.8	2.3	3.5	58.5	71.3
	2015	633	70.0	6.6	70.0	11.3	8.3	0.6	3.2	63.1	76.3
Japan	2011	627	78.6	4.1	78.6	9.4	5.6	0.3	2.0	77.8	79.4
	2015	628	82.3	4.3	82.3	6.6	4.6	0.5	1.6	79.2	85.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_12 (S051111): Earth Science / Applying Type: MC Key: B
Label: Shadow of tree at different times

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	630	56.2	16.6	56.2	14.0	9.0	0.6	3.5	49.6	62.4
	2015	676	80.9	4.2	80.9	8.1	5.2	0.2	1.4	78.8	83.2
Korea, Rep. of	2011	625	79.1	5.2	79.1	11.3	4.3	0.1	0.0	72.2	85.4
	2015	669	84.9	5.1	84.9	6.0	3.0	0.4	0.5	83.1	86.7
Kuwait	2011	588	40.4	16.6	40.4	14.4	17.5	4.1	7.0	36.5	45.2
	2015	498	37.2	17.4	37.2	13.5	13.5	7.2	11.3	36.8	38.1
Lithuania	2011	664	66.6	7.2	66.6	12.8	10.6	0.9	2.0	61.8	71.4
	2015	657	64.1	5.5	64.1	17.3	11.6	0.2	1.3	61.2	66.9
Morocco	2011	1097	37.0	22.7	37.0	10.2	15.6	8.4	6.2	34.3	39.3
	2015	718	41.2	15.4	41.2	12.3	16.7	2.4	12.0	35.7	46.3
Netherlands	2011	454	66.4	4.3	66.4	17.2	10.1	0.5	1.5	61.7	72.6
	2015	654	60.9	6.1	60.9	19.9	9.8	0.6	2.7	54.7	66.7
New Zealand	2011	788	53.7	7.9	53.7	22.2	10.8	1.2	4.3	50.0	57.3
	2015	903	62.8	6.5	62.8	19.3	6.6	1.8	3.0	55.6	69.7
Northern Ireland	2011	516	54.6	6.7	54.6	26.0	9.7	1.2	1.7	50.4	59.4
	2015	420	65.1	4.9	65.1	18.0	11.4	0.6	0.0	55.5	72.4
Oman	2011	1491	46.6	16.8	46.6	11.3	17.9	2.5	5.0	42.8	50.5
	2015	1288	53.5	13.2	53.5	15.3	13.4	1.8	2.8	50.5	56.9
Portugal	2011	572	69.0	5.7	69.0	13.5	8.0	1.0	2.8	60.7	77.2
	2015	659	66.4	4.0	66.4	14.7	7.5	1.2	6.3	59.2	73.3
Qatar	2011	585	56.6	10.0	56.6	16.9	11.9	1.2	3.4	60.1	53.4
	2015	739	43.7	12.6	43.7	21.7	15.3	2.2	4.6	40.9	46.7
Russian Federation	2011	626	64.0	9.1	64.0	17.6	6.5	0.4	2.5	60.5	67.3
	2015	706	64.7	5.7	64.7	19.5	7.4	1.2	1.6	62.2	67.0
Saudi Arabia	2011	512	44.8	13.4	44.8	17.5	21.7	0.8	1.8	42.4	47.4
	2015	624	37.5	12.6	37.5	24.6	17.1	2.7	5.6	38.8	36.2
Serbia	2011	622	65.2	8.5	65.2	13.6	7.5	1.4	3.7	64.1	66.3
	2015	583	64.3	4.7	64.3	11.8	9.7	1.8	7.7	61.4	66.9
Singapore	2011	906	78.3	4.6	78.3	10.2	6.3	0.2	0.4	74.7	81.7
	2015	929	79.1	4.2	79.1	10.9	5.1	0.5	0.2	76.5	81.5
Slovak Republic	2011	800	62.3	5.5	62.3	21.5	8.8	0.4	1.5	59.8	64.8
	2015	813	56.5	8.5	56.5	23.6	6.8	1.2	3.5	53.6	59.0
Slovenia	2011	643	59.8	11.0	59.8	15.3	9.3	1.2	3.4	59.9	59.7
	2015	624	61.2	8.9	61.2	16.3	9.3	0.7	3.5	58.5	63.5
Spain	2011	600	52.2	9.2	52.2	24.9	10.5	1.4	1.9	48.4	55.8
	2015	1112	54.8	10.2	54.8	21.3	8.1	1.2	4.4	45.5	63.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S03_12 (S051111): Earth Science / Applying Type: MC Key: B
Label: Shadow of tree at different times

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	681	62.7	10.3	62.7	13.3	10.1	0.3	3.3	54.8	70.3
	2015	599	71.3	7.8	71.3	6.9	8.0	1.4	4.6	68.5	74.2
Turkey	2011	1066	52.9	14.6	52.9	15.5	13.9	0.8	2.3	48.8	57.0
	2015	910	54.1	10.3	54.1	15.9	17.4	0.7	1.6	45.8	62.3
United Arab Emirates	2011	2104	48.1	14.1	48.1	15.4	17.0	1.6	3.8	44.5	51.7
	2015	3017	55.8	12.1	55.8	13.7	14.8	1.6	2.0	52.3	59.0
United States	2011	1800	60.7	6.7	60.7	20.6	8.9	0.4	2.8	52.7	68.5
	2015	1419	61.7	5.6	61.7	18.5	8.4	1.1	4.7	55.9	68.0

International Avg (n=40)	2011	30210	60.8	8.8	60.8	15.3	10.7	1.3	3.1	56.8	64.9
	2015	30613	62.9	7.6	62.9	15.1	9.1	1.5	3.8	58.8	66.7

Ontario, Canada	2011	671	56.1	5.9	56.1	20.9	9.1	1.8	6.2	56.5	55.7
	2015	651	57.6	6.0	57.6	19.7	7.2	2.2	7.4	50.3	64.4
Quebec, Canada	2011	599	56.6	7.7	56.6	21.9	10.0	1.4	2.4	44.3	69.6
	2015	395	54.8	6.0	54.8	20.0	10.9	0.9	7.3	54.2	55.4
Norway (4)	2011	450	57.9	6.7	57.9	13.9	13.1	1.9	6.5	53.8	62.4
	2015	587	58.1	9.0	58.1	14.8	9.0	2.1	6.9	51.2	64.9
Abu Dhabi, UAE	2011	601	46.2	16.6	46.2	15.9	16.0	1.3	4.1	41.7	50.7
	2015	713	50.5	14.3	50.5	13.3	16.4	2.0	3.6	49.1	51.8
Dubai, UAE	2011	872	51.5	11.6	51.5	16.6	15.2	2.1	3.1	46.4	56.1
	2015	1060	63.6	9.8	63.6	12.6	11.0	1.5	1.5	59.3	67.7
Florida, US	2011	379	55.9	4.7	55.9	25.2	11.3	0.0	2.8	52.0	60.5
	2015	287	55.7	5.2	55.7	21.6	10.7	1.1	5.7	50.8	60.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_01 (S041009): Life Science / Knowing Type: MC Key: D
Label: Organ digestion takes place

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	67.1	12.5	9.3	10.1	67.1	1.1	0.0	69.1	65.1
	2015	867	68.2	12.4	7.2	10.3	68.2	1.7	0.2	68.0	68.4
Bahrain	2011	586	68.9	11.4	7.8	9.0	68.9	1.9	1.0	77.8	60.6
	2015	586	62.1	8.9	12.0	14.6	62.1	1.0	1.3	66.4	57.4
Belgium (Flemish)	2011	689	73.4	10.3	3.7	12.0	73.4	0.7	0.0	75.3	71.7
	2015	761	61.5	13.8	4.4	18.9	61.5	1.2	0.1	60.5	62.5
Chile	2011	789	71.4	6.5	4.0	14.4	71.4	2.8	0.8	70.4	72.4
	2015	678	66.0	7.8	6.7	15.9	66.0	2.5	1.0	67.5	64.4
Chinese Taipei	2011	614	95.5	1.6	1.7	1.2	95.5	0.0	0.0	96.3	94.9
	2015	612	97.0	0.9	1.1	1.0	97.0	0.0	0.0	97.9	96.2
Croatia	2011	659	81.8	3.3	1.5	13.2	81.8	0.3	0.0	81.1	82.4
	2015	569	89.2	1.5	0.2	8.9	89.2	0.1	0.0	89.9	88.6
Czech Republic	2011	647	96.6	1.2	0.8	1.0	96.6	0.4	0.0	96.4	96.8
	2015	740	94.9	1.7	1.4	1.4	94.9	0.6	0.1	96.0	93.6
Denmark	2011	580	75.5	5.9	4.5	10.4	75.5	2.9	0.9	71.5	79.6
	2015	528	79.4	5.1	2.2	12.1	79.4	1.0	0.3	79.9	78.8
England	2011	481	72.3	9.7	7.3	9.8	72.3	0.9	0.0	70.3	74.1
	2015	578	77.4	9.1	5.1	7.9	77.4	0.4	0.2	76.2	78.8
Finland	2011	664	93.7	1.2	0.1	3.4	93.7	1.5	0.0	96.2	91.7
	2015	716	92.6	1.3	0.6	3.3	92.6	1.7	0.6	93.5	91.7
Georgia	2011	690	93.8	0.7	2.6	1.4	93.8	0.9	0.5	96.6	91.6
	2015	552	93.5	1.6	0.9	1.3	93.5	1.2	1.5	94.2	92.8
Germany	2011	569	95.6	1.9	0.9	1.1	95.6	0.3	0.2	95.2	96.1
	2015	556	94.7	2.5	1.0	1.1	94.7	0.7	0.0	96.4	93.2
Hong Kong SAR	2011	561	95.5	1.2	0.8	2.4	95.5	0.1	0.0	96.4	94.6
	2015	507	96.2	2.2	1.0	0.7	96.2	0.0	0.0	96.4	95.9
Hungary	2011	740	93.4	2.7	0.7	2.7	93.4	0.3	0.1	92.1	94.6
	2015	716	95.4	1.3	0.2	2.0	95.4	1.0	0.0	95.3	95.6
Iran, Islamic Rep. of	2011	824	37.8	29.6	19.7	9.1	37.8	3.0	0.8	36.9	38.6
	2015	539	24.3	33.2	19.2	17.7	24.3	4.8	0.9	24.7	23.8
Ireland	2011	645	66.4	10.0	6.5	16.2	66.4	0.9	0.0	59.2	73.1
	2015	620	75.5	8.4	5.2	10.1	75.5	0.7	0.0	74.6	76.4
Italy	2011	601	95.0	1.8	0.6	1.1	95.0	1.5	0.0	94.3	95.7
	2015	620	93.8	2.1	0.4	1.4	93.8	2.2	0.1	94.4	93.3
Japan	2011	634	87.3	6.2	3.0	3.1	87.3	0.4	0.0	86.9	87.8
	2015	629	81.8	9.5	3.3	4.9	81.8	0.5	0.0	79.2	84.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_01 (S041009): Life Science / Knowing Type: MC Key: D
Label: Organ digestion takes place

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	94.2	2.5	0.5	1.6	94.2	0.3	0.9	94.6	93.7
	2015	672	97.3	0.8	0.4	1.4	97.3	0.2	0.1	98.1	96.4
Korea, Rep. of	2011	619	79.9	10.4	3.2	6.3	79.9	0.2	0.0	80.8	79.1
	2015	674	87.1	7.3	1.3	4.1	87.1	0.2	0.0	84.7	89.3
Kuwait	2011	585	64.5	10.6	11.5	9.3	64.5	3.5	0.5	70.6	57.3
	2015	506	60.2	11.7	13.1	9.7	60.2	3.7	1.5	64.6	56.0
Lithuania	2011	693	88.9	5.4	2.2	2.9	88.9	0.4	0.2	89.7	88.2
	2015	638	93.0	2.5	1.6	2.3	93.0	0.5	0.0	91.9	94.1
Morocco	2011	1002	54.4	12.4	21.3	11.9	54.4	0.0	0.0	57.3	51.7
	2015	729	53.2	10.6	20.6	12.4	53.2	2.4	0.8	53.2	53.2
Netherlands	2011	467	75.3	8.1	0.9	14.6	75.3	0.9	0.2	73.9	76.6
	2015	646	70.0	8.9	2.6	17.2	70.0	1.1	0.2	69.4	70.5
New Zealand	2011	804	62.8	10.9	10.1	14.7	62.8	0.9	0.5	64.6	61.2
	2015	894	60.7	14.5	9.0	13.3	60.7	1.9	0.5	62.8	58.7
Northern Ireland	2011	500	73.5	9.8	6.0	10.2	73.5	0.6	0.0	72.8	74.1
	2015	442	71.0	11.8	4.8	12.3	71.0	0.1	0.0	72.5	69.6
Oman	2011	1479	66.8	10.6	8.2	11.6	66.8	2.2	0.6	68.3	65.5
	2015	1313	72.0	8.3	9.0	8.8	72.0	1.6	0.4	76.1	67.8
Portugal	2011	581	94.0	1.2	2.8	1.5	94.0	0.5	0.0	93.4	94.6
	2015	670	96.6	0.8	0.6	1.2	96.6	0.3	0.4	95.9	97.3
Qatar	2011	595	58.7	10.8	17.4	10.5	58.7	2.4	0.2	58.6	58.8
	2015	752	68.8	9.0	13.0	6.2	68.8	2.6	0.5	70.5	67.0
Russian Federation	2011	644	98.7	0.2	0.3	0.6	98.7	0.2	0.0	99.1	98.4
	2015	713	98.9	0.3	0.1	0.7	98.9	0.0	0.0	98.7	99.1
Saudi Arabia	2011	653	73.3	9.8	7.8	7.2	73.3	1.9	0.0	81.1	65.3
	2015	607	58.8	12.9	13.2	13.0	58.8	1.5	0.6	63.7	54.4
Serbia	2011	620	83.7	7.0	4.0	3.9	83.7	1.2	0.1	87.9	80.4
	2015	570	85.4	5.3	4.6	3.1	85.4	1.1	0.4	87.3	83.8
Singapore	2011	906	91.9	4.3	0.9	2.9	91.9	0.0	0.0	90.7	92.9
	2015	932	95.1	2.5	0.7	1.4	95.1	0.2	0.1	95.0	95.1
Slovak Republic	2011	803	95.9	1.0	0.9	1.3	95.9	0.3	0.5	95.7	96.1
	2015	836	93.0	2.4	1.6	2.7	93.0	0.3	0.0	93.0	93.0
Slovenia	2011	637	93.8	1.8	1.7	2.1	93.8	0.5	0.1	95.8	92.2
	2015	639	96.6	0.6	0.5	1.6	96.6	0.4	0.2	96.5	96.7
Spain	2011	608	90.3	3.7	1.8	3.2	90.3	0.8	0.2	93.7	87.0
	2015	1098	90.9	2.0	2.7	3.5	90.9	0.3	0.6	91.1	90.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_01 (S041009): Life Science / Knowing Type: MC Key: D
Label: Organ digestion takes place

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	76.4	4.4	2.5	15.1	76.4	1.2	0.4	77.6	75.0
	2015	595	72.0	2.3	1.0	21.2	72.0	3.3	0.1	75.2	68.9
Turkey	2011	1075	59.9	16.2	8.4	14.9	59.9	0.6	0.0	56.6	62.6
	2015	923	67.6	10.8	6.2	15.0	67.6	0.2	0.1	65.5	69.7
United Arab Emirates	2011	2102	63.3	10.7	15.0	9.4	63.3	1.5	0.2	65.1	61.6
	2015	3023	61.5	12.1	12.7	10.2	61.5	3.3	0.2	62.8	60.4
United States	2011	1785	71.3	10.9	5.6	10.9	71.3	1.0	0.2	67.1	75.1
	2015	1433	71.5	10.1	6.7	10.1	71.5	0.9	0.6	69.1	74.1

International Avg (n=40)	2011	30321	79.3	7.0	5.2	7.2	79.3	1.0	0.2	79.9	78.7
	2015	30679	79.1	6.8	5.0	7.6	79.1	1.2	0.3	79.7	78.5

Ontario, Canada	2011	639	68.6	10.7	6.4	12.5	68.6	1.4	0.5	64.7	72.5
	2015	643	70.7	8.8	7.7	11.0	70.7	1.1	0.7	73.7	67.8
Quebec, Canada	2011	615	83.5	4.4	4.8	6.6	83.5	0.8	0.0	84.8	82.2
	2015	388	85.9	5.3	3.4	5.2	85.9	0.3	0.0	82.7	89.0
Norway (4)	2011	445	56.5	15.0	10.4	15.6	56.5	2.2	0.3	52.1	62.3
	2015	589	57.3	12.5	7.6	21.2	57.3	0.6	0.6	56.5	58.0
Abu Dhabi, UAE	2011	603	62.7	10.6	14.7	10.3	62.7	1.7	0.0	68.5	57.0
	2015	710	50.5	15.2	16.1	12.1	50.5	6.0	0.1	49.5	51.4
Dubai, UAE	2011	870	66.9	9.6	12.3	9.3	66.9	1.7	0.1	63.6	69.6
	2015	1074	72.3	8.9	10.0	7.3	72.3	1.5	0.1	74.5	70.0
Florida, US	2011	391	76.5	10.2	4.8	8.0	76.5	0.2	0.2	75.5	77.4
	2015	292	79.6	11.3	2.0	6.6	79.6	0.6	0.0	78.7	80.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_02 (S041223): Life Science / Knowing Type: MC Key: C
Label: Function of part X of a plant

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	59.5	11.7	6.0	59.5	20.0	2.5	0.2	60.1	58.8
	2015	867	56.6	13.6	9.8	56.6	16.3	3.5	0.2	53.4	59.4
Bahrain	2011	586	50.1	25.2	8.6	50.1	14.1	0.9	1.0	50.0	50.2
	2015	586	51.3	22.0	12.4	51.3	11.5	1.3	1.5	56.3	45.7
Belgium (Flemish)	2011	689	61.1	12.8	6.8	61.1	18.3	1.0	0.0	61.4	60.8
	2015	761	57.1	16.6	7.4	57.1	17.6	1.2	0.1	55.2	58.8
Chile	2011	789	53.8	19.5	10.6	53.8	13.1	2.1	0.8	51.8	55.8
	2015	678	47.7	26.4	10.4	47.7	12.9	1.2	1.4	48.1	47.3
Chinese Taipei	2011	614	71.5	11.4	7.3	71.5	9.8	0.0	0.0	71.4	71.5
	2015	612	62.8	17.5	9.1	62.8	10.5	0.2	0.0	65.1	60.6
Croatia	2011	659	50.9	26.1	13.3	50.9	7.9	1.8	0.0	50.8	51.0
	2015	569	56.6	19.2	8.2	56.6	13.8	2.2	0.0	58.1	55.2
Czech Republic	2011	647	69.2	17.0	5.7	69.2	6.4	1.8	0.0	67.5	70.8
	2015	740	72.2	13.1	6.7	72.2	5.8	1.9	0.3	71.1	73.4
Denmark	2011	580	69.1	9.8	4.0	69.1	12.9	3.3	0.9	68.0	70.3
	2015	528	60.6	9.6	8.2	60.6	18.8	2.4	0.5	61.1	60.1
England	2011	481	57.4	14.6	12.8	57.4	14.2	0.8	0.2	57.3	57.5
	2015	578	57.3	11.5	11.0	57.3	19.3	0.8	0.2	58.0	56.5
Finland	2011	664	67.0	16.1	6.5	67.0	9.4	1.0	0.0	71.0	63.7
	2015	716	64.7	17.1	6.6	64.7	9.4	1.5	0.7	70.4	59.4
Georgia	2011	690	57.2	8.8	8.6	57.2	22.3	2.6	0.5	60.1	54.8
	2015	552	64.1	9.2	6.3	64.1	15.9	2.3	2.2	67.4	60.6
Germany	2011	569	67.7	10.9	6.0	67.7	12.4	2.8	0.2	66.0	69.3
	2015	556	61.1	13.7	4.5	61.1	16.2	4.5	0.0	57.2	64.6
Hong Kong SAR	2011	561	57.7	20.0	8.8	57.7	13.2	0.3	0.0	57.2	58.1
	2015	507	54.1	22.2	11.5	54.1	12.2	0.0	0.0	57.0	51.5
Hungary	2011	740	74.2	11.4	8.4	74.2	4.7	1.2	0.1	72.8	75.5
	2015	716	73.9	11.5	5.9	73.9	5.5	3.1	0.2	73.7	74.0
Iran, Islamic Rep. of	2011	824	39.0	29.9	12.4	39.0	15.8	2.0	0.8	41.4	36.6
	2015	539	34.0	31.6	14.9	34.0	13.7	4.9	0.9	34.2	33.8
Ireland	2011	645	46.5	16.1	13.8	46.5	22.2	1.3	0.0	43.6	49.2
	2015	620	48.0	15.2	8.0	48.0	28.0	0.7	0.0	50.1	46.2
Italy	2011	601	58.2	18.0	6.4	58.2	15.9	1.5	0.0	61.4	55.0
	2015	620	54.0	20.0	10.3	54.0	14.3	1.3	0.1	55.2	52.9
Japan	2011	634	74.5	16.2	5.0	74.5	4.1	0.3	0.0	75.3	73.6
	2015	629	66.6	19.7	7.1	66.6	5.9	0.7	0.0	62.6	70.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_02 (S041223): Life Science / Knowing Type: MC Key: C
Label: Function of part X of a plant

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	59.0	15.8	6.8	59.0	16.2	1.2	0.9	57.3	60.8
	2015	672	73.4	9.9	7.5	73.4	8.7	0.4	0.1	74.0	72.8
Korea, Rep. of	2011	619	78.5	14.2	2.9	78.5	4.3	0.1	0.0	81.6	75.8
	2015	674	73.8	18.7	3.8	73.8	3.2	0.5	0.0	74.4	73.3
Kuwait	2011	584	35.8	19.5	17.5	35.8	21.7	5.0	0.5	37.8	33.3
	2015	506	30.9	23.9	15.6	30.9	22.5	5.1	1.9	31.5	30.4
Lithuania	2011	693	57.6	17.3	12.0	57.6	10.8	2.2	0.2	57.0	58.1
	2015	638	63.8	19.0	8.7	63.8	7.9	0.6	0.0	67.5	60.3
Morocco	2011	991	39.2	13.9	16.7	39.2	30.3	0.0	0.0	41.4	37.1
	2015	724	39.5	21.3	12.7	39.5	21.9	3.9	0.8	30.8	46.6
Netherlands	2011	467	70.2	9.1	5.1	70.2	14.3	1.1	0.2	68.2	72.1
	2015	646	59.7	17.0	7.5	59.7	14.6	1.0	0.2	58.1	61.1
New Zealand	2011	804	51.6	13.2	6.6	51.6	26.4	1.6	0.6	53.5	49.8
	2015	894	52.6	11.4	6.9	52.6	26.8	1.7	0.6	54.0	51.2
Northern Ireland	2011	500	50.4	13.9	10.1	50.4	24.5	1.1	0.0	49.7	51.0
	2015	441	47.8	15.9	6.8	47.8	28.7	0.8	0.0	48.6	47.0
Oman	2011	1479	42.8	26.5	10.2	42.8	16.8	2.8	0.9	45.6	40.3
	2015	1312	55.0	22.1	9.1	55.0	11.8	1.6	0.4	55.8	54.2
Portugal	2011	581	55.8	24.3	6.4	55.8	12.6	0.9	0.0	51.9	60.1
	2015	670	49.4	30.5	7.1	49.4	10.5	2.0	0.5	48.7	50.2
Qatar	2011	595	43.8	24.0	15.8	43.8	14.8	1.3	0.3	45.1	42.7
	2015	752	50.1	21.0	12.1	50.1	13.5	2.6	0.8	49.3	50.9
Russian Federation	2011	644	76.7	9.3	7.2	76.7	6.1	0.7	0.0	75.9	77.5
	2015	713	80.7	6.1	7.3	80.7	4.4	1.5	0.0	79.0	82.4
Saudi Arabia	2011	653	35.7	24.4	14.5	35.7	22.9	2.4	0.0	33.7	37.8
	2015	607	35.9	25.1	14.2	35.9	21.2	2.6	0.9	40.9	31.5
Serbia	2011	620	62.1	15.4	8.5	62.1	10.6	3.1	0.3	65.8	59.1
	2015	570	64.7	18.4	7.4	64.7	7.1	2.0	0.4	64.0	65.3
Singapore	2011	906	77.9	15.3	2.5	77.9	4.2	0.1	0.0	79.6	76.3
	2015	932	81.8	12.1	2.8	81.8	2.9	0.3	0.1	81.6	82.0
Slovak Republic	2011	803	63.7	16.5	9.1	63.7	9.0	1.2	0.5	62.5	64.8
	2015	836	56.0	22.1	9.8	56.0	10.8	1.3	0.0	50.5	61.3
Slovenia	2011	637	68.6	14.8	6.3	68.6	8.4	1.5	0.4	66.7	70.2
	2015	639	75.1	12.6	4.2	75.1	7.2	0.5	0.4	74.5	75.6
Spain	2011	588	49.1	30.3	10.6	49.1	8.0	1.7	0.2	46.2	51.8
	2015	1098	52.9	28.9	8.2	52.9	8.1	1.2	0.6	52.7	53.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_02 (S041223): Life Science / Knowing Type: MC Key: C
Label: Function of part X of a plant

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	57.8	12.4	7.4	57.8	20.3	1.7	0.4	59.0	56.4
	2015	595	62.7	12.5	8.5	62.7	12.9	3.3	0.1	67.8	57.9
Turkey	2011	1075	43.3	31.4	12.4	43.3	12.3	0.6	0.0	41.2	45.1
	2015	923	49.7	24.8	13.3	49.7	11.9	0.3	0.1	51.9	47.5
United Arab Emirates	2011	2102	47.1	22.2	12.1	47.1	16.8	1.5	0.3	46.9	47.3
	2015	3021	51.9	22.7	9.6	51.9	12.8	2.7	0.4	54.4	49.5
United States	2011	1785	63.2	15.9	8.2	63.2	11.6	0.9	0.2	59.9	66.1
	2015	1433	60.5	16.0	10.3	60.5	12.0	0.5	0.7	60.6	60.5

International Avg (n=40)	2011	30289	57.9	17.4	9.0	57.9	14.0	1.5	0.3	57.8	57.9
	2015	30670	57.8	18.0	8.8	57.8	13.2	1.7	0.4	58.1	57.4

Ontario, Canada	2011	639	59.8	16.9	8.0	59.8	13.2	1.3	0.7	59.0	60.7
	2015	643	62.1	14.8	10.2	62.1	11.2	0.8	1.0	67.0	57.2
Quebec, Canada	2011	615	52.8	17.7	4.8	52.8	23.3	1.3	0.0	59.7	46.6
	2015	386	47.6	15.6	10.5	47.6	25.4	0.9	0.0	51.4	43.8
Norway (4)	2011	445	75.1	6.8	4.9	75.1	11.1	1.7	0.3	78.5	70.5
	2015	589	70.5	5.4	6.7	70.5	15.9	0.8	0.6	74.4	67.0
Abu Dhabi, UAE	2011	603	45.2	22.5	11.5	45.2	18.9	1.9	0.0	46.0	44.4
	2015	709	47.2	24.6	10.0	47.2	13.1	4.6	0.5	51.2	43.4
Dubai, UAE	2011	870	54.1	19.4	10.6	54.1	14.1	1.7	0.1	51.4	56.3
	2015	1073	64.4	15.9	9.1	64.4	9.2	1.4	0.1	67.2	61.6
Florida, US	2011	391	61.0	14.5	13.5	61.0	10.8	0.0	0.2	62.2	59.9
	2015	292	60.8	18.3	11.4	60.8	8.5	0.9	0.0	62.7	58.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_03 (S041026): Life Science / Knowing Type: MC Key: D
Label: Body covering protects a reptile

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	74.9	2.4	14.9	6.4	74.9	1.1	0.3	77.1	72.9
	2015	867	79.5	1.3	10.6	6.8	79.5	1.6	0.3	79.8	79.1
Bahrain	2011	586	40.6	8.3	40.4	8.8	40.6	0.9	1.0	41.2	40.0
	2015	586	40.3	7.1	36.8	12.5	40.3	1.8	1.5	39.2	41.5
Belgium (Flemish)	2011	689	57.4	7.9	23.6	9.9	57.4	1.3	0.0	53.9	60.5
	2015	761	59.4	8.2	21.8	9.2	59.4	1.2	0.1	59.1	59.7
Chile	2011	789	67.0	3.7	15.2	11.4	67.0	1.9	0.8	64.5	69.4
	2015	678	59.6	5.4	17.3	14.4	59.6	2.0	1.4	56.4	63.0
Chinese Taipei	2011	614	29.1	4.0	33.4	33.2	29.1	0.4	0.0	26.8	31.0
	2015	612	31.7	4.5	33.5	29.6	31.7	0.6	0.0	24.4	38.4
Croatia	2011	659	33.3	7.0	37.9	18.7	33.3	3.0	0.0	29.5	37.1
	2015	569	36.5	7.5	35.1	18.5	36.5	2.4	0.1	29.9	42.6
Czech Republic	2011	647	47.3	1.0	46.7	4.7	47.3	0.3	0.0	41.0	53.3
	2015	740	52.1	0.8	42.6	3.8	52.1	0.5	0.3	47.8	56.6
Denmark	2011	580	66.5	4.0	14.4	11.0	66.5	3.2	0.9	67.7	65.1
	2015	528	65.5	5.8	14.6	12.4	65.5	1.3	0.5	64.9	66.1
England	2011	481	72.4	2.1	17.1	7.2	72.4	1.0	0.2	70.9	73.7
	2015	578	74.1	2.0	12.6	10.7	74.1	0.4	0.2	74.1	74.1
Finland	2011	664	55.7	4.4	27.1	11.5	55.7	1.0	0.2	55.1	56.2
	2015	716	47.0	4.6	34.3	10.9	47.0	2.5	0.7	42.4	51.2
Georgia	2011	689	38.6	3.0	37.9	18.8	38.6	1.0	0.7	42.4	35.4
	2015	552	34.6	2.7	37.9	20.5	34.6	1.9	2.3	34.3	34.9
Germany	2011	569	58.7	1.5	22.2	15.7	58.7	1.5	0.5	55.4	61.8
	2015	556	64.6	1.3	15.7	15.7	64.6	2.6	0.0	59.4	69.3
Hong Kong SAR	2011	561	36.7	7.9	28.8	26.1	36.7	0.5	0.0	31.3	41.6
	2015	507	47.2	8.5	22.3	21.6	47.2	0.4	0.0	43.7	50.4
Hungary	2011	740	59.5	7.3	27.8	3.7	59.5	1.5	0.2	61.6	57.7
	2015	716	64.0	4.4	23.9	4.6	64.0	2.7	0.4	59.5	68.4
Iran, Islamic Rep. of	2011	824	35.6	10.5	41.3	10.0	35.6	1.8	0.8	30.9	40.1
	2015	539	29.5	5.9	46.4	13.7	29.5	3.5	1.0	26.9	32.2
Ireland	2011	645	62.0	4.1	18.6	14.1	62.0	1.0	0.2	58.5	65.2
	2015	620	76.2	2.5	12.7	7.7	76.2	0.9	0.0	76.8	75.7
Italy	2011	601	52.2	8.3	29.2	9.4	52.2	0.9	0.0	45.7	59.0
	2015	620	54.6	7.5	27.3	8.3	54.6	2.2	0.1	50.0	58.9
Japan	2011	634	21.6	21.9	39.2	16.6	21.6	0.8	0.0	18.4	24.8
	2015	629	20.7	25.0	37.5	16.0	20.7	0.8	0.0	16.0	25.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_03 (S041026): Life Science / Knowing Type: MC Key: D
Label: Body covering protects a reptile

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	52.8	1.8	28.8	13.0	52.8	2.6	0.9	52.8	52.8
	2015	672	55.0	0.4	34.8	9.4	55.0	0.4	0.1	54.0	55.9
Korea, Rep. of	2011	619	45.7	12.4	25.5	16.4	45.7	0.0	0.0	39.0	51.4
	2015	674	51.0	12.0	25.0	11.3	51.0	0.7	0.0	52.5	49.7
Kuwait	2011	587	24.3	15.4	41.1	13.8	24.3	4.8	0.5	26.1	22.2
	2015	508	25.8	19.8	35.5	12.4	25.8	4.7	1.9	28.2	23.4
Lithuania	2011	693	37.3	2.4	51.1	8.5	37.3	0.5	0.2	32.9	41.1
	2015	638	45.6	3.3	42.8	7.1	45.6	1.2	0.0	43.5	47.5
Morocco	2011	982	29.2	13.3	41.0	16.5	29.2	0.0	0.0	31.4	27.2
	2015	726	32.7	14.3	36.8	13.2	32.7	2.1	1.0	34.0	31.7
Netherlands	2011	467	64.0	3.4	28.1	3.3	64.0	0.9	0.2	60.0	67.9
	2015	646	73.5	3.6	18.4	3.3	73.5	1.0	0.2	72.2	74.7
New Zealand	2011	804	64.6	3.4	20.1	10.1	64.6	1.0	0.7	59.9	68.9
	2015	894	68.6	3.1	17.1	8.7	68.6	1.9	0.6	67.2	70.0
Northern Ireland	2011	500	71.4	2.9	17.7	7.6	71.4	0.1	0.2	73.0	70.0
	2015	445	73.2	3.1	15.2	8.2	73.2	0.2	0.0	71.0	75.3
Oman	2011	1479	38.5	11.6	33.6	13.2	38.5	2.3	0.9	39.0	38.1
	2015	1310	39.2	10.3	37.1	11.5	39.2	1.5	0.5	40.4	37.9
Portugal	2011	581	65.6	1.7	21.0	10.5	65.6	1.1	0.0	58.1	73.7
	2015	670	65.9	0.9	23.2	8.2	65.9	1.1	0.7	58.9	72.8
Qatar	2011	595	38.2	9.6	34.2	16.8	38.2	0.9	0.3	36.5	39.5
	2015	752	49.5	9.1	31.2	8.1	49.5	0.9	1.1	48.5	50.6
Russian Federation	2011	644	59.4	2.1	29.3	7.5	59.4	1.6	0.0	57.9	61.0
	2015	713	62.8	1.2	27.7	6.2	62.8	2.1	0.0	57.7	67.9
Saudi Arabia	2011	653	38.3	12.1	37.8	8.6	38.3	3.1	0.1	44.4	32.1
	2015	607	35.6	12.2	34.8	14.6	35.6	1.9	0.9	37.9	33.5
Serbia	2011	620	30.7	6.7	51.1	9.6	30.7	1.6	0.4	34.5	27.6
	2015	570	41.5	5.9	45.0	6.0	41.5	1.0	0.6	35.1	46.7
Singapore	2011	906	76.0	3.9	15.7	4.3	76.0	0.1	0.0	75.7	76.3
	2015	932	78.0	3.3	14.0	4.4	78.0	0.3	0.1	77.4	78.5
Slovak Republic	2011	803	41.6	6.3	48.7	2.3	41.6	0.6	0.5	34.5	48.4
	2015	836	54.8	4.8	37.2	2.1	54.8	1.0	0.1	49.4	60.0
Slovenia	2011	636	46.6	12.9	38.5	0.7	46.6	0.9	0.4	45.3	47.7
	2015	639	56.2	11.9	30.2	0.5	56.2	0.9	0.4	51.7	60.8
Spain	2011	608	68.8	4.8	18.5	6.2	68.8	1.2	0.5	66.3	71.1
	2015	1098	79.6	3.3	11.7	4.4	79.6	0.4	0.6	77.0	82.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_03 (S041026): Life Science / Knowing Type: MC Key: D
Label: Body covering protects a reptile

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	37.2	3.8	40.0	17.0	37.2	1.6	0.4	38.1	36.2
	2015	595	28.2	5.6	49.3	15.1	28.2	1.7	0.2	27.8	28.8
Turkey	2011	1075	9.9	18.9	61.3	9.7	9.9	0.2	0.0	9.3	10.3
	2015	923	11.6	17.2	54.0	16.6	11.6	0.5	0.1	10.0	13.2
United Arab Emirates	2011	2102	41.1	9.6	35.3	12.1	41.1	1.6	0.3	39.7	42.5
	2015	3023	47.5	9.6	28.3	12.3	47.5	1.9	0.4	45.9	48.9
United States	2011	1785	78.8	2.2	14.1	4.0	78.8	0.7	0.2	78.7	78.8
	2015	1433	78.8	1.6	12.8	5.6	78.8	0.6	0.7	77.4	80.2

International Avg (n=40)	2011	30301	49.2	6.8	31.2	11.2	49.2	1.3	0.3	47.6	50.7
	2015	30678	52.3	6.5	28.6	10.6	52.3	1.4	0.5	50.1	54.4

Ontario, Canada	2011	639	76.3	2.1	12.4	7.6	76.3	0.9	0.7	76.4	76.2
	2015	644	77.8	1.5	14.8	4.2	77.8	0.7	1.0	78.5	77.3
Quebec, Canada	2011	615	78.2	3.1	10.9	7.0	78.2	0.7	0.0	80.0	76.6
	2015	386	83.6	2.4	6.1	7.4	83.6	0.5	0.0	81.4	85.6
Norway (4)	2011	445	53.6	11.1	21.1	11.2	53.6	2.6	0.3	50.8	57.3
	2015	589	56.9	13.1	15.9	11.9	56.9	1.6	0.6	53.0	60.4
Abu Dhabi, UAE	2011	603	37.3	9.9	38.4	12.7	37.3	1.8	0.0	37.5	37.0
	2015	710	39.6	12.4	30.6	14.9	39.6	2.0	0.6	38.9	40.3
Dubai, UAE	2011	870	51.7	7.0	28.7	11.3	51.7	1.2	0.2	48.9	53.9
	2015	1074	62.2	4.5	20.7	10.9	62.2	1.6	0.1	59.9	64.5
Florida, US	2011	391	74.0	1.3	20.2	4.4	74.0	0.0	0.2	73.8	74.2
	2015	292	79.6	1.3	15.0	2.9	79.6	0.9	0.3	77.4	82.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_04 (S041177): Life Science / Applying Type: CR 2 Points
Label: Living things make their own food

COUNTRY	Year	N	20 %	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	17.8	18.5	9.4	12.4	40.3	1.2	0.5	45.6	17.8	19.3	16.4
	2015	867	17.9	18.4	11.1	7.8	43.4	1.1	0.3	47.4	17.9	21.9	14.3
Bahrain	2011	586	22.3	20.2	6.9	8.4	39.0	2.1	1.0	49.4	22.3	23.2	21.5
	2015	586	22.1	19.7	9.9	6.1	39.6	1.1	1.5	51.7	22.1	24.6	19.3
Belgium (Flemish)	2011	689	10.0	19.5	10.6	3.9	54.8	1.2	0.0	40.2	10.0	12.0	8.2
	2015	761	9.6	20.1	11.0	4.5	53.0	1.7	0.1	40.8	9.6	10.1	9.2
Chile	2011	789	17.1	15.9	9.6	11.2	42.2	2.9	1.2	42.5	17.1	15.0	19.1
	2015	678	17.8	19.8	9.9	13.9	34.4	2.7	1.4	47.5	17.8	18.3	17.3
Chinese Taipei	2011	614	17.6	24.8	10.2	3.7	43.5	0.1	0.0	52.7	17.6	17.6	17.6
	2015	612	15.9	19.2	10.0	5.9	48.7	0.3	0.0	45.1	15.9	14.6	17.2
Croatia	2011	659	14.2	19.6	7.1	7.6	46.4	5.0	0.2	40.9	14.2	16.3	12.0
	2015	569	15.5	22.7	11.3	5.1	43.3	1.8	0.3	49.5	15.5	11.8	18.9
Czech Republic	2011	647	19.0	22.1	9.8	3.2	43.8	2.1	0.0	51.0	19.0	19.0	19.1
	2015	740	18.0	19.5	11.0	4.3	44.0	2.6	0.5	48.5	18.0	18.2	17.7
Denmark	2011	580	10.1	16.8	11.2	11.2	44.4	5.4	0.9	38.2	10.1	11.3	8.8
	2015	528	8.7	24.6	15.6	7.7	40.4	2.6	0.5	48.9	8.7	7.5	10.1
England	2011	481	15.3	22.7	13.2	9.1	38.7	0.8	0.2	51.2	15.3	14.7	15.8
	2015	578	15.1	24.4	15.9	6.1	36.9	1.5	0.2	55.3	15.1	16.4	13.7
Finland	2011	664	19.8	21.8	8.9	4.6	43.3	1.4	0.2	50.4	19.8	22.1	17.8
	2015	716	16.7	16.2	10.4	6.0	48.1	1.8	0.7	43.3	16.7	20.8	13.0
Georgia	2011	689	5.8	8.5	8.7	14.4	53.4	8.3	0.8	23.0	5.8	5.4	6.1
	2015	552	5.3	7.5	6.8	12.2	59.4	6.5	2.5	19.5	5.3	5.4	5.1
Germany	2011	569	6.8	14.5	13.4	9.8	50.7	4.4	0.5	34.7	6.8	7.9	5.7
	2015	556	9.1	15.7	15.7	7.3	46.0	6.1	0.2	40.4	9.1	8.7	9.4
Hong Kong SAR	2011	561	17.1	27.3	15.0	2.4	37.7	0.5	0.0	59.4	17.1	15.8	18.2
	2015	507	22.7	22.5	17.5	2.2	35.2	0.0	0.0	62.7	22.7	24.4	21.2
Hungary	2011	738	12.0	12.0	8.5	4.2	59.4	3.6	0.4	32.4	12.0	11.8	12.1
	2015	716	12.5	12.6	10.0	5.0	57.6	1.9	0.4	35.1	12.5	15.1	9.9
Iran, Islamic Rep. of	2011	824	5.1	10.9	14.4	33.0	32.4	3.2	0.9	30.4	5.1	6.8	3.5
	2015	539	1.4	7.8	9.0	41.0	35.4	3.5	2.0	18.2	1.4	0.7	2.1
Ireland	2011	645	11.1	16.5	14.1	6.9	49.8	1.3	0.2	41.8	11.1	12.7	9.7
	2015	620	15.8	16.8	11.8	4.8	49.7	1.1	0.0	44.4	15.8	18.1	13.8
Italy	2011	601	19.8	16.2	15.2	11.4	33.9	3.6	0.0	51.2	19.8	18.6	21.0
	2015	620	27.9	18.2	16.1	7.8	27.7	2.2	0.1	62.2	27.9	25.9	29.8
Japan	2011	634	11.2	18.8	12.4	3.3	53.6	0.6	0.0	42.5	11.2	10.3	12.2
	2015	629	11.2	23.9	12.5	3.2	49.0	0.3	0.0	47.6	11.2	10.6	11.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_04 (S041177): Life Science / Applying Type: CR 2 Points
Label: Living things make their own food

COUNTRY	Year	N	20 %	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	26.9	19.9	6.9	13.5	30.4	1.1	1.2	53.8	26.9	28.4	25.5
	2015	672	35.7	25.6	6.0	5.6	26.4	0.6	0.1	67.3	35.7	35.3	36.0
Korea, Rep. of	2011	619	5.9	13.9	16.4	21.3	42.4	0.1	0.0	36.2	5.9	5.3	6.5
	2015	674	5.5	20.8	20.7	21.0	31.7	0.4	0.0	46.9	5.5	4.8	6.1
Kuwait	2011	587	11.7	12.7	5.4	15.6	49.3	4.1	1.0	29.9	11.7	17.0	5.6
	2015	508	6.1	10.7	7.9	18.0	50.7	4.4	2.1	24.8	6.1	9.0	3.4
Lithuania	2011	693	7.2	21.9	12.1	21.4	35.3	1.8	0.2	41.2	7.2	9.0	5.7
	2015	638	10.5	25.0	16.8	19.9	27.0	0.9	0.0	52.2	10.5	9.3	11.6
Morocco	2011	1121	0.4	10.0	9.6	9.7	59.0	10.2	1.2	19.9	0.4	0.4	0.3
	2015	730	1.3	3.0	0.1	0.2	52.9	41.5	1.1	4.3	1.3	1.6	1.0
Netherlands	2011	467	10.6	22.1	14.5	3.0	48.7	0.9	0.2	47.2	10.6	12.8	8.5
	2015	646	11.1	26.5	12.6	2.0	46.6	1.0	0.2	50.2	11.1	9.9	12.2
New Zealand	2011	804	12.2	20.4	12.0	7.9	45.1	1.7	0.7	44.6	12.2	10.5	13.8
	2015	894	16.9	16.5	10.5	6.7	47.6	1.1	0.6	43.9	16.9	15.4	18.4
Northern Ireland	2011	500	15.4	19.9	14.6	6.0	43.5	0.5	0.2	49.9	15.4	15.2	15.5
	2015	447	13.1	15.0	17.9	9.7	42.2	2.1	0.0	46.1	13.1	12.6	13.5
Oman	2011	1479	21.4	14.5	6.3	6.9	46.4	3.5	1.0	42.2	21.4	22.7	20.1
	2015	1314	28.0	17.0	5.8	10.5	36.4	1.8	0.5	50.9	28.0	31.2	24.7
Portugal	2011	581	8.1	16.6	19.8	8.4	44.1	2.8	0.2	44.6	8.1	9.9	6.1
	2015	670	6.1	19.2	18.3	8.0	44.9	2.9	0.7	43.6	6.1	6.3	5.9
Qatar	2011	595	9.4	15.1	9.1	12.6	51.5	2.1	0.3	33.5	9.4	7.3	11.1
	2015	752	12.0	18.0	13.5	18.7	34.7	2.0	1.1	43.5	12.0	12.2	11.8
Russian Federation	2011	644	5.0	34.7	12.9	6.6	40.1	0.7	0.0	52.5	5.0	4.0	5.9
	2015	713	5.8	37.6	20.6	5.4	30.1	0.5	0.0	64.0	5.8	6.5	5.1
Saudi Arabia	2011	656	12.9	21.2	19.7	20.4	21.5	4.1	0.1	53.9	12.9	14.7	11.2
	2015	608	11.4	17.5	12.5	6.6	48.0	3.0	0.9	41.5	11.4	11.5	11.4
Serbia	2011	620	25.2	21.1	6.2	3.1	41.6	2.3	0.4	52.5	25.2	26.0	24.5
	2015	570	21.8	26.2	8.4	2.3	38.2	2.0	1.0	56.5	21.8	21.5	22.2
Singapore	2011	906	48.9	23.5	10.3	3.6	13.7	0.1	0.0	82.7	48.9	46.1	51.5
	2015	932	48.1	25.1	12.7	3.6	10.0	0.3	0.1	86.0	48.1	49.2	47.2
Slovak Republic	2011	803	11.3	23.1	8.3	8.4	45.6	2.8	0.5	42.7	11.3	12.4	10.3
	2015	836	14.4	17.8	10.9	10.3	42.6	3.7	0.2	43.1	14.4	16.0	12.8
Slovenia	2011	637	16.3	17.1	9.8	9.7	43.1	3.5	0.4	43.3	16.3	18.1	14.8
	2015	639	20.2	19.5	11.4	8.6	38.2	1.6	0.5	51.1	20.2	24.0	16.4
Spain	2011	608	19.7	25.2	11.5	9.4	30.3	3.4	0.5	56.4	19.7	17.0	22.2
	2015	1098	20.4	25.1	15.7	12.3	23.6	2.3	0.6	61.2	20.4	18.3	22.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_04 (S041177): Life Science / Applying Type: CR 2 Points
Label: Living things make their own food

COUNTRY	Year	N	20 %	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	4.0	19.6	11.1	8.4	52.9	3.1	0.8	34.7	4.0	4.9	3.0
	2015	595	7.5	22.7	11.3	7.0	48.7	2.6	0.2	41.5	7.5	10.8	4.3
Turkey	2011	1075	16.5	20.7	10.4	6.3	44.5	1.6	0.0	47.6	16.5	17.3	15.8
	2015	923	19.4	24.7	12.3	8.8	33.7	1.1	0.1	56.3	19.4	20.9	17.9
United Arab Emirates	2011	2102	16.1	17.0	8.7	9.6	45.6	2.5	0.5	41.9	16.1	15.3	16.9
	2015	3023	18.1	19.6	10.5	14.4	34.2	2.8	0.4	48.2	18.1	19.1	17.0
United States	2011	1785	41.7	23.6	6.9	4.5	22.5	0.6	0.3	72.1	41.7	41.6	41.8
	2015	1433	39.3	22.0	9.0	3.2	25.3	0.4	0.8	70.3	39.3	39.0	39.6

International Avg (n=40)	2011	30440	15.0	19.0	11.0	9.4	42.6	2.5	0.4	45.0	15.0	15.4	14.5
	2015	30689	15.9	19.6	12.0	8.8	40.1	2.9	0.5	47.5	15.9	16.4	15.4

Ontario, Canada	2011	639	28.0	22.1	9.3	5.3	32.8	1.9	0.7	59.4	28.0	28.5	27.6
	2015	645	32.4	21.4	10.1	3.9	30.0	1.1	1.2	63.9	32.4	34.9	29.9
Quebec, Canada	2011	614	17.9	19.7	8.6	6.0	45.7	2.1	0.0	46.1	17.9	18.5	17.4
	2015	388	15.3	23.9	11.5	4.3	43.0	1.9	0.2	50.7	15.3	19.7	11.0
Norway (4)	2011	445	6.8	14.5	11.1	6.8	54.7	5.8	0.3	32.4	6.8	6.2	7.7
	2015	589	9.0	16.5	14.2	13.7	43.4	2.3	1.0	39.6	9.0	9.7	8.4
Abu Dhabi, UAE	2011	603	14.1	15.4	7.0	9.9	50.3	3.1	0.2	36.5	14.1	13.0	15.2
	2015	710	15.0	18.1	8.9	14.3	39.9	3.4	0.6	41.9	15.0	12.5	17.3
Dubai, UAE	2011	870	18.3	22.4	9.9	8.0	39.7	1.5	0.2	50.6	18.3	16.2	19.9
	2015	1074	24.8	25.1	13.2	9.1	27.0	0.8	0.1	63.1	24.8	27.3	22.3
Florida, US	2011	391	41.4	21.3	5.7	5.2	24.9	1.3	0.2	68.4	41.4	43.7	39.3
	2015	292	45.2	22.6	9.0	2.4	19.3	1.2	0.3	76.8	45.2	42.4	48.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_05 (S041183): Life Science / Applying Type: CR 2 Points
Label: Maintaining good physical health

COUNTRY	Year	N	20 %	29 %	10 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	8.8	3.1	57.3	5.5	14.5	10.1	0.7	74.7	11.9	11.3	12.4
	2015	867	16.9	0.8	43.8	1.8	30.0	6.3	0.3	63.4	17.7	19.7	15.9
Bahrain	2011	586	10.9	0.4	37.5	5.0	25.0	19.3	1.9	53.8	11.3	13.0	9.8
	2015	586	17.4	1.2	31.6	6.1	25.4	16.8	1.5	56.3	18.6	20.2	16.8
Belgium (Flemish)	2011	689	21.1	1.0	63.8	2.9	7.7	3.4	0.1	88.8	22.0	22.5	21.6
	2015	761	14.6	3.8	60.9	11.1	3.6	5.9	0.1	90.4	18.4	21.4	15.7
Chile	2011	789	14.2	1.5	63.6	1.3	8.5	9.5	1.4	80.6	15.7	18.0	13.4
	2015	678	18.3	1.1	62.3	2.8	6.6	7.1	1.8	84.5	19.4	19.9	18.9
Chinese Taipei	2011	614	38.5	6.2	37.9	8.6	3.2	5.6	0.0	91.2	44.7	49.4	40.6
	2015	612	13.0	6.7	49.4	12.9	12.2	5.9	0.0	81.9	19.7	17.7	21.5
Croatia	2011	659	11.4	1.5	69.9	6.7	2.6	7.6	0.2	89.5	12.8	16.6	9.1
	2015	569	22.3	3.3	58.2	3.8	10.3	1.9	0.3	87.6	25.6	28.9	22.6
Czech Republic	2011	647	21.8	0.6	40.1	4.7	16.4	16.5	0.0	67.1	22.4	20.7	23.9
	2015	740	14.5	0.1	41.2	2.1	22.5	19.0	0.8	57.8	14.6	16.6	12.5
Denmark	2011	580	13.7	0.3	68.2	0.0	8.4	8.4	1.0	82.2	14.0	14.5	13.6
	2015	528	11.9	0.7	60.8	6.5	12.5	6.6	1.0	79.9	12.6	14.9	10.2
England	2011	481	15.3	7.4	41.6	5.1	17.3	12.8	0.4	69.5	22.7	24.1	21.5
	2015	578	14.5	5.8	46.0	2.6	24.8	6.2	0.2	68.9	20.3	21.7	18.8
Finland	2011	664	16.4	10.3	41.5	8.1	12.9	10.5	0.2	76.3	26.7	33.1	21.3
	2015	716	10.3	7.5	50.9	11.0	10.1	9.2	0.9	79.8	17.9	21.1	14.9
Georgia	2011	689	17.6	2.7	35.1	10.2	15.2	18.4	0.8	65.6	20.3	20.3	20.3
	2015	552	7.8	0.6	45.5	5.2	20.3	17.6	2.9	59.1	8.4	6.9	9.8
Germany	2011	569	8.1	5.3	48.5	17.6	13.6	6.4	0.5	79.5	13.4	14.7	12.2
	2015	556	16.3	10.5	36.8	15.9	11.9	8.0	0.6	79.5	26.8	28.2	25.6
Hong Kong SAR	2011	561	24.5	4.0	43.6	9.3	12.5	6.1	0.0	81.4	28.6	29.5	27.8
	2015	507	19.0	9.7	47.0	14.5	5.4	4.5	0.0	90.1	28.6	32.6	25.0
Hungary	2011	740	32.0	4.1	39.0	2.5	12.8	9.0	0.5	77.7	36.2	37.7	34.8
	2015	716	25.6	7.0	41.2	6.3	11.3	8.1	0.6	80.1	32.6	33.0	32.2
Iran, Islamic Rep. of	2011	824	6.3	4.0	41.4	11.4	20.0	15.7	1.1	63.1	10.3	12.0	8.7
	2015	539	7.3	5.3	33.1	14.3	15.1	23.0	2.0	60.0	12.7	18.0	7.3
Ireland	2011	645	10.2	5.7	52.1	8.5	12.1	11.2	0.2	76.5	15.9	16.7	15.1
	2015	620	14.4	4.0	57.9	7.5	9.9	6.4	0.0	83.7	18.4	15.6	20.9
Italy	2011	601	11.3	0.7	52.1	4.0	21.8	10.1	0.0	68.2	12.0	12.3	11.7
	2015	620	12.0	1.3	45.7	2.3	27.9	10.7	0.1	61.3	13.3	15.3	11.4
Japan	2011	634	14.9	7.4	56.6	11.5	6.2	3.4	0.0	90.4	22.3	21.0	23.7
	2015	629	40.2	19.3	25.3	7.2	3.8	4.2	0.0	92.0	59.5	62.9	56.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_05 (S041183): Life Science / Applying Type: CR 2 Points
Label: Maintaining good physical health

COUNTRY	Year	N	20 %	29 %	10 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	29.8	3.7	36.6	12.4	8.5	7.7	1.2	82.6	33.5	32.4	34.6
	2015	672	4.7	3.4	79.1	3.7	3.7	5.3	0.1	91.0	8.1	11.4	5.0
Korea, Rep. of	2011	619	41.8	5.1	46.8	2.8	2.9	0.7	0.0	96.5	46.9	51.4	43.0
	2015	674	40.6	9.8	38.3	7.5	3.0	0.8	0.0	96.3	50.4	51.1	49.8
Kuwait	2011	587	5.7	0.0	19.8	1.7	31.7	39.8	1.2	27.3	5.7	7.8	3.3
	2015	508	9.4	1.5	12.4	1.3	25.2	48.0	2.2	24.6	10.9	13.2	8.7
Lithuania	2011	693	15.9	0.2	63.4	2.8	10.5	7.0	0.2	82.3	16.2	17.5	15.0
	2015	638	17.0	1.8	66.5	4.6	5.2	5.0	0.0	89.8	18.7	19.6	17.9
Morocco	2011	1121	0.8	0.1	5.9	2.2	39.4	47.5	4.1	8.9	0.8	1.1	0.6
	2015	730	6.8	2.3	15.2	2.1	39.5	32.3	1.8	26.4	9.1	9.6	8.7
Netherlands	2011	467	20.8	4.4	52.9	1.7	16.0	3.9	0.2	79.8	25.2	24.1	26.3
	2015	646	14.7	1.8	65.9	4.8	9.8	2.7	0.2	87.2	16.5	18.4	14.8
New Zealand	2011	804	12.8	3.8	45.0	3.3	27.9	6.5	0.7	64.8	16.5	16.5	16.6
	2015	894	9.8	5.0	47.7	6.0	24.4	6.4	0.6	68.6	14.8	17.1	12.5
Northern Ireland	2011	500	14.7	3.4	45.9	8.5	15.8	11.5	0.2	72.5	18.1	16.3	19.7
	2015	447	15.7	4.7	47.6	4.9	19.7	7.5	0.0	72.8	20.3	21.0	19.7
Oman	2011	1479	6.0	0.0	20.8	10.7	27.9	33.4	1.3	37.5	6.1	7.9	4.4
	2015	1314	9.1	2.1	28.0	6.4	35.5	18.2	0.6	45.6	11.2	13.9	8.5
Portugal	2011	581	10.1	0.5	76.9	1.8	4.4	6.1	0.3	89.2	10.6	9.5	11.8
	2015	670	17.3	2.2	63.9	7.4	4.4	4.1	0.8	90.7	19.4	20.6	18.3
Qatar	2011	594	10.7	0.5	29.0	1.4	34.8	23.3	0.3	41.5	11.2	10.9	11.4
	2015	752	14.5	1.1	30.7	4.0	30.5	17.9	1.3	50.3	15.6	17.7	13.5
Russian Federation	2011	644	14.4	1.2	70.7	4.0	3.5	6.2	0.0	90.3	15.7	18.5	12.8
	2015	713	13.7	0.0	77.6	1.9	3.3	3.4	0.0	93.3	13.7	11.9	15.5
Saudi Arabia	2011	656	4.1	0.5	50.7	1.5	21.1	21.4	0.6	56.9	4.6	6.1	3.0
	2015	608	2.4	0.3	32.7	0.7	25.0	38.0	0.9	36.2	2.8	5.5	0.4
Serbia	2011	620	21.7	0.5	60.7	1.8	5.2	9.1	0.8	84.8	22.3	27.6	18.0
	2015	570	14.2	1.3	66.9	3.2	4.5	8.9	1.1	85.6	15.5	18.4	13.1
Singapore	2011	906	32.0	2.2	53.0	2.5	7.9	2.4	0.0	89.7	34.2	36.7	31.8
	2015	932	26.5	2.6	58.9	2.4	7.7	1.9	0.1	90.3	29.1	31.4	27.0
Slovak Republic	2011	803	17.7	2.5	44.6	4.0	19.8	10.9	0.5	68.8	20.2	24.8	15.8
	2015	836	16.9	4.6	42.5	8.8	15.6	11.2	0.3	72.8	21.5	21.0	21.9
Slovenia	2011	637	16.6	1.5	41.2	5.0	13.7	21.7	0.4	64.3	18.0	18.9	17.3
	2015	639	17.4	3.5	54.1	3.8	9.9	10.8	0.5	78.8	21.0	23.7	18.2
Spain	2011	608	23.2	0.6	51.7	2.8	13.1	8.1	0.5	78.3	23.8	22.2	25.3
	2015	1098	12.0	2.2	65.9	8.0	6.7	4.6	0.6	88.1	14.2	15.2	13.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_05 (S041183): Life Science / Applying Type: CR 2 Points
Label: Maintaining good physical health

COUNTRY	Year	N	20 %	29 %	10 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	10.5	2.6	49.4	9.2	17.8	9.7	0.8	71.6	13.0	16.0	9.7
	2015	595	9.5	3.1	47.8	9.4	21.3	8.5	0.5	69.8	12.6	14.9	10.5
Turkey	2011	1075	7.6	1.8	58.5	10.0	15.0	7.1	0.0	77.9	9.4	11.5	7.6
	2015	923	9.6	4.1	54.1	15.2	10.5	6.4	0.2	82.9	13.6	17.0	10.4
United Arab Emirates	2011	2102	14.2	0.9	29.7	2.3	27.6	24.9	0.5	47.0	15.0	17.2	12.9
	2015	3023	12.5	1.0	40.0	3.4	21.8	20.7	0.6	56.9	13.6	15.2	12.0
United States	2011	1785	24.7	4.4	45.1	4.4	17.6	3.6	0.3	78.5	29.0	28.2	29.8
	2015	1433	24.6	5.0	41.5	4.1	18.8	5.1	0.8	75.3	29.7	30.9	28.3

International Avg (n=40)	2011	30441	16.3	2.7	47.2	5.5	15.3	12.4	0.6	71.7	19.0	20.3	17.8
	2015	30689	15.4	3.8	47.9	6.2	15.2	10.9	0.6	73.2	19.2	20.8	17.6

Ontario, Canada	2011	639	25.6	4.1	42.4	8.6	12.4	6.1	0.8	80.7	29.7	30.9	28.5
	2015	645	17.9	3.0	53.7	8.4	10.0	5.8	1.2	83.0	20.9	23.8	18.1
Quebec, Canada	2011	615	19.6	3.5	60.9	5.6	4.3	6.1	0.0	89.6	23.1	26.0	20.5
	2015	388	19.3	2.8	60.6	5.5	6.4	4.8	0.6	88.2	22.1	22.5	21.7
Norway (4)	2011	445	7.3	1.5	66.3	4.3	12.3	8.0	0.3	79.4	8.8	11.3	5.5
	2015	589	5.3	1.3	56.5	7.4	19.1	9.0	1.4	70.6	6.7	7.5	6.0
Abu Dhabi, UAE	2011	603	13.7	0.2	26.4	2.4	31.9	25.2	0.3	42.6	13.8	18.7	9.1
	2015	710	9.1	0.9	34.5	3.3	27.5	23.8	0.9	47.8	10.0	9.0	11.0
Dubai, UAE	2011	870	14.2	1.5	37.3	2.1	22.2	22.5	0.2	55.0	15.7	15.8	15.6
	2015	1074	19.0	1.5	49.5	3.8	14.6	11.5	0.1	73.8	20.5	23.8	17.3
Florida, US	2011	391	24.7	3.3	49.1	5.2	13.4	4.2	0.2	82.3	28.0	27.0	28.8
	2015	292	25.1	4.7	47.1	5.0	12.8	4.8	0.5	81.9	29.8	32.9	26.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_06 (S041008): Life Science / Knowing Type: MC Key: A
Label: Which animal is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	47.6	47.6	9.9	25.6	14.5	1.2	1.2	45.6	49.5
	2015	867	52.5	52.5	9.9	21.8	14.2	1.3	0.3	55.0	50.3
Bahrain	2011	586	33.0	33.0	21.7	27.3	15.5	0.3	2.1	31.1	34.8
	2015	586	30.4	30.4	24.2	27.3	14.7	1.6	1.7	28.6	32.4
Belgium (Flemish)	2011	689	35.9	35.9	13.6	31.2	16.4	2.8	0.1	32.9	38.6
	2015	761	39.6	39.6	10.9	30.7	14.2	4.6	0.1	42.4	37.0
Chile	2011	789	46.6	46.6	12.2	24.4	13.4	2.0	1.5	43.6	49.5
	2015	678	38.0	38.0	12.9	28.2	17.2	1.8	1.9	39.6	36.4
Chinese Taipei	2011	614	55.6	55.6	8.5	29.0	6.2	0.7	0.0	57.0	54.4
	2015	612	68.9	68.9	3.6	17.3	9.2	1.0	0.0	69.2	68.7
Croatia	2011	659	30.1	30.1	7.2	40.3	19.1	3.0	0.2	27.3	32.8
	2015	569	37.5	37.5	11.3	29.4	19.2	2.1	0.5	33.6	41.1
Czech Republic	2011	647	76.2	76.2	2.8	9.8	10.0	1.1	0.0	76.7	75.8
	2015	740	80.0	80.0	2.8	8.5	5.7	2.0	1.0	84.4	75.3
Denmark	2011	580	51.6	51.6	7.6	24.2	11.1	4.0	1.4	52.7	50.4
	2015	528	48.6	48.6	9.3	24.3	12.0	4.3	1.4	52.2	44.9
England	2011	481	41.1	41.1	8.6	30.0	18.7	1.0	0.6	43.2	39.2
	2015	578	44.1	44.1	7.4	31.5	16.0	0.8	0.2	45.2	43.0
Finland	2011	664	64.4	64.4	6.5	13.5	13.8	1.5	0.3	69.0	60.5
	2015	716	55.4	55.4	11.6	15.4	13.0	3.6	1.0	60.1	51.0
Georgia	2011	690	29.7	29.7	4.6	56.7	5.7	2.5	0.8	23.4	34.9
	2015	552	32.1	32.1	3.3	52.5	7.3	1.6	3.2	28.5	35.8
Germany	2011	569	47.9	47.9	12.4	20.6	13.5	5.1	0.5	49.8	46.2
	2015	556	42.7	42.7	14.0	23.1	13.6	5.8	0.8	44.6	41.0
Hong Kong SAR	2011	561	50.9	50.9	9.7	29.7	8.6	1.1	0.0	50.0	51.6
	2015	507	57.4	57.4	9.3	23.1	9.1	1.2	0.0	59.6	55.4
Hungary	2011	740	68.0	68.0	5.4	10.6	11.1	3.9	1.0	66.9	68.9
	2015	716	74.8	74.8	3.3	5.6	9.1	6.4	0.9	74.9	74.6
Iran, Islamic Rep. of	2011	824	36.4	36.4	25.5	21.9	11.8	3.2	1.2	31.4	41.3
	2015	539	24.5	24.5	21.2	29.0	18.5	4.5	2.4	23.7	25.4
Ireland	2011	645	36.3	36.3	13.6	33.9	14.8	1.1	0.2	28.0	43.9
	2015	620	40.8	40.8	10.2	36.6	11.8	0.3	0.2	40.6	41.1
Italy	2011	601	63.8	63.8	6.0	19.3	8.0	2.7	0.2	61.8	66.0
	2015	620	59.3	59.3	7.4	20.9	8.2	3.7	0.4	58.9	59.8
Japan	2011	634	43.4	43.4	14.0	26.8	9.5	6.2	0.0	42.0	45.0
	2015	629	44.1	44.1	15.0	21.7	11.5	7.6	0.1	42.2	45.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_06 (S041008): Life Science / Knowing Type: MC Key: A
Label: Which animal is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	50.5	50.5	11.1	15.4	19.7	1.7	1.6	44.5	56.5
	2015	672	70.0	70.0	5.2	12.0	12.6	0.1	0.1	69.1	70.8
Korea, Rep. of	2011	619	46.0	46.0	10.9	25.9	16.9	0.3	0.0	44.2	47.5
	2015	674	48.3	48.3	8.2	23.7	19.0	0.7	0.0	43.2	53.0
Kuwait	2011	581	28.6	28.6	25.4	23.4	12.4	8.8	1.4	30.4	26.5
	2015	508	30.0	30.0	20.9	21.6	17.3	6.8	3.3	32.2	28.0
Lithuania	2011	693	47.1	47.1	10.4	20.9	18.3	3.2	0.2	49.2	45.2
	2015	638	51.1	51.1	10.7	18.8	16.5	2.8	0.0	54.2	48.3
Morocco	2011	929	22.1	22.1	33.5	24.9	18.9	0.6	0.0	22.9	21.4
	2015	723	22.6	22.6	24.7	25.3	21.7	3.8	1.9	20.4	24.5
Netherlands	2011	467	40.0	40.0	14.7	30.6	12.8	1.8	0.2	35.9	43.8
	2015	646	36.2	36.2	17.0	26.3	17.0	3.2	0.2	37.8	34.7
New Zealand	2011	804	40.1	40.1	7.6	29.9	19.8	1.6	1.0	36.5	43.4
	2015	894	40.1	40.1	7.7	30.6	17.3	3.6	0.7	36.6	43.7
Northern Ireland	2011	500	38.9	38.9	10.6	32.3	16.9	1.1	0.2	40.7	37.3
	2015	443	42.0	42.0	8.5	33.7	15.2	0.5	0.0	41.2	42.8
Oman	2011	1479	33.4	33.4	20.2	27.0	14.7	2.9	1.7	31.3	35.4
	2015	1312	38.2	38.2	18.4	26.0	15.0	1.6	0.8	36.4	39.9
Portugal	2011	581	53.2	53.2	6.3	32.9	6.7	0.3	0.6	50.6	55.9
	2015	670	47.4	47.4	5.1	35.2	9.3	2.0	0.9	48.5	46.4
Qatar	2011	595	33.6	33.6	22.4	24.1	17.3	2.0	0.6	28.5	37.7
	2015	752	34.4	34.4	19.0	24.8	16.9	3.5	1.5	31.8	37.0
Russian Federation	2011	644	48.2	48.2	15.9	10.5	23.7	1.6	0.0	48.2	48.3
	2015	713	53.8	53.8	16.4	10.3	16.7	2.7	0.1	54.7	52.9
Saudi Arabia	2011	652	32.4	32.4	22.4	19.7	23.9	1.0	0.6	33.0	31.8
	2015	602	25.7	25.7	24.8	25.2	19.8	3.3	1.3	27.1	24.5
Serbia	2011	619	38.4	38.4	6.0	34.5	14.4	5.6	1.1	36.8	39.7
	2015	570	53.8	53.8	6.7	24.3	10.9	3.0	1.3	48.2	58.4
Singapore	2011	906	70.6	70.6	2.9	22.8	3.7	0.0	0.0	70.6	70.7
	2015	932	76.4	76.4	3.6	16.1	3.6	0.2	0.1	75.9	76.8
Slovak Republic	2011	803	70.6	70.6	4.3	12.7	10.3	1.8	0.5	73.6	67.7
	2015	836	66.6	66.6	6.3	15.4	9.9	1.3	0.4	66.4	66.8
Slovenia	2011	630	45.4	45.4	5.4	26.1	20.8	1.7	0.6	43.7	46.9
	2015	639	53.4	53.4	5.9	22.9	15.0	2.4	0.5	52.4	54.3
Spain	2011	608	51.5	51.5	10.8	26.4	6.6	4.3	0.5	48.9	54.0
	2015	1098	61.7	61.7	7.6	21.3	6.7	2.1	0.6	61.7	61.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_06 (S041008): Life Science / Knowing Type: MC Key: A
Label: Which animal is a mammal

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	38.7	38.7	14.3	21.4	20.7	4.0	0.8	42.5	34.5
	2015	595	37.6	37.6	18.0	16.3	19.4	7.9	0.9	40.0	35.5
Turkey	2011	1075	42.1	42.1	12.9	30.5	13.5	0.9	0.1	38.7	45.1
	2015	923	39.0	39.0	14.5	32.6	12.5	1.3	0.2	39.2	38.8
United Arab Emirates	2011	2102	39.8	39.8	19.6	23.2	14.5	2.3	0.6	36.9	42.7
	2015	3023	41.4	41.4	18.4	24.4	12.5	2.6	0.6	42.4	40.5
United States	2011	1785	65.1	65.1	6.8	18.9	6.9	2.1	0.3	64.2	65.8
	2015	1433	61.5	61.5	7.6	18.8	9.0	1.9	1.1	62.0	61.0

International Avg (n=40)	2011	30235	45.9	45.9	12.1	25.2	13.9	2.3	0.6	44.6	47.0
	2015	30670	47.6	47.6	11.6	23.8	13.5	2.8	0.8	47.6	47.5

Ontario, Canada	2011	639	56.7	56.7	10.0	23.1	8.6	0.8	0.8	52.7	60.7
	2015	642	60.0	60.0	7.0	22.6	8.4	0.9	1.2	56.8	63.5
Quebec, Canada	2011	615	48.6	48.6	8.8	28.1	11.9	2.5	0.0	50.9	46.6
	2015	386	54.4	54.4	6.7	30.0	8.1	0.1	0.7	55.0	53.8
Norway (4)	2011	445	33.9	33.9	30.5	16.3	13.8	5.3	0.3	34.5	33.0
	2015	589	34.4	34.4	31.1	14.9	13.7	4.4	1.5	36.1	32.8
Abu Dhabi, UAE	2011	603	42.6	42.6	20.3	20.4	13.3	3.1	0.4	38.5	46.6
	2015	710	40.6	40.6	16.0	24.3	15.1	3.0	1.0	40.2	41.0
Dubai, UAE	2011	870	40.4	40.4	15.2	27.0	15.3	1.6	0.4	35.5	44.4
	2015	1074	47.6	47.6	15.2	26.2	8.9	2.0	0.1	49.7	45.6
Florida, US	2011	391	64.7	64.7	6.6	22.9	4.6	1.0	0.4	64.6	64.8
	2015	292	65.5	65.5	6.0	19.4	6.2	2.0	0.8	65.9	65.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_08 (S041195): Physical Science / Applying Type: CR 1 Point
Label: Bulb lights in which circuit

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	13.6	21.4	42.0	19.7	0.7	1.2	1.4	13.6	10.9	16.0
	2015	867	10.0	22.2	46.1	16.8	2.4	1.9	0.5	10.0	10.6	9.4
Bahrain	2011	586	12.4	27.7	28.8	23.7	3.4	1.7	2.4	12.4	12.6	12.1
	2015	586	17.8	24.8	23.0	20.3	10.5	2.0	1.7	17.8	19.9	15.4
Belgium (Flemish)	2011	689	18.1	19.5	47.0	10.4	3.9	0.9	0.1	18.1	18.7	17.5
	2015	761	20.0	21.5	44.6	10.9	1.3	1.7	0.1	20.0	18.2	21.8
Chile	2011	789	17.2	16.9	35.8	23.8	2.0	2.3	1.9	17.2	16.2	18.2
	2015	678	7.5	24.6	41.5	17.0	3.5	2.6	3.3	7.5	6.2	8.8
Chinese Taipei	2011	614	43.8	27.7	16.2	11.7	0.3	0.3	0.0	43.8	41.4	45.9
	2015	612	28.9	32.8	21.7	16.0	0.0	0.7	0.0	28.9	30.7	27.2
Croatia	2011	659	15.1	17.9	27.4	29.1	3.3	6.9	0.4	15.1	14.2	15.9
	2015	569	22.4	15.4	27.4	26.1	3.8	4.2	0.7	22.4	20.1	24.5
Czech Republic	2011	647	17.8	30.5	32.5	14.7	1.7	2.7	0.0	17.8	12.3	23.0
	2015	740	17.0	26.2	32.1	6.0	13.7	3.4	1.7	17.0	16.4	17.5
Denmark	2011	580	29.9	13.7	28.6	13.0	10.5	2.7	1.6	29.9	29.0	30.9
	2015	528	20.6	9.6	16.6	7.3	40.2	3.0	2.8	20.6	17.2	24.2
England	2011	481	23.8	20.3	38.9	14.4	1.3	0.7	0.7	23.8	21.6	25.7
	2015	578	19.8	17.4	44.3	14.9	1.4	1.4	0.8	19.8	17.4	22.5
Finland	2011	664	23.4	26.4	35.6	12.6	0.4	1.3	0.3	23.4	22.0	24.6
	2015	716	24.3	27.9	34.0	9.5	1.2	1.9	1.3	24.3	24.0	24.6
Georgia	2011	690	4.9	33.1	17.9	24.6	6.0	12.6	0.8	4.9	4.0	5.6
	2015	552	9.7	31.6	22.3	18.8	6.1	7.9	3.7	9.7	10.0	9.4
Germany	2011	569	26.5	28.2	35.0	7.9	0.3	1.3	0.8	26.5	26.4	26.6
	2015	556	29.8	26.8	32.8	5.9	0.5	2.5	1.7	29.8	26.6	32.7
Hong Kong SAR	2011	561	21.0	27.7	43.5	6.5	0.6	0.7	0.0	21.0	18.6	23.2
	2015	507	15.4	31.0	44.1	6.3	2.7	0.5	0.0	15.4	18.1	12.8
Hungary	2011	740	10.2	30.9	31.7	21.9	1.6	2.2	1.5	10.2	9.4	11.0
	2015	716	9.9	34.3	31.5	19.9	1.4	2.1	1.0	9.9	8.4	11.3
Iran, Islamic Rep. of	2011	824	21.6	27.5	14.5	30.3	2.2	1.9	2.1	21.6	21.2	21.9
	2015	539	14.6	23.0	19.2	34.8	2.1	3.4	3.0	14.6	12.3	16.9
Ireland	2011	645	23.1	15.9	40.2	19.3	0.5	0.7	0.3	23.1	25.0	21.4
	2015	620	15.1	22.2	45.8	14.7	1.8	0.1	0.3	15.1	14.2	15.9
Italy	2011	601	11.3	24.9	35.9	20.4	3.2	4.2	0.2	11.3	11.6	11.1
	2015	619	10.0	24.7	39.9	18.5	1.1	5.1	0.7	10.0	6.9	12.9
Japan	2011	634	63.9	18.2	8.9	4.5	4.5	0.0	0.0	63.9	65.5	62.3
	2015	629	56.5	23.6	10.6	4.1	4.1	0.9	0.1	56.5	59.8	53.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_08 (S041195): Physical Science / Applying Type: CR 1 Point
Label: Bulb lights in which circuit

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	17.9	12.3	19.4	21.8	19.7	7.4	1.5	17.9	18.2	17.6
	2015	672	42.1	9.9	15.5	9.0	21.1	2.5	0.1	42.1	41.7	42.4
Korea, Rep. of	2011	619	33.8	20.2	39.7	5.3	0.3	0.6	0.0	33.8	33.0	34.5
	2015	674	30.3	20.0	41.7	6.9	0.5	0.5	0.0	30.3	24.4	35.7
Kuwait	2011	587	4.4	33.1	27.7	19.6	8.1	5.4	1.6	4.4	7.0	1.5
	2015	508	4.4	27.2	21.5	25.1	13.7	4.7	3.5	4.4	5.6	3.2
Lithuania	2011	693	18.9	36.8	30.5	10.6	1.1	2.0	0.2	18.9	16.7	20.9
	2015	638	21.6	32.2	33.1	9.6	0.6	2.9	0.0	21.6	21.9	21.4
Morocco	2011	1121	2.4	13.6	7.5	7.2	27.7	36.8	4.9	2.4	1.3	3.4
	2015	730	10.8	34.1	22.8	22.3	5.6	1.4	3.0	10.8	14.6	7.7
Netherlands	2011	467	18.3	23.3	45.0	10.6	2.3	0.4	0.2	18.3	15.6	20.9
	2015	646	15.7	21.2	40.3	13.3	6.4	2.6	0.5	15.7	17.6	14.1
New Zealand	2011	804	21.0	26.2	32.0	18.1	0.3	1.1	1.3	21.0	21.0	21.0
	2015	894	15.7	22.9	35.5	18.7	2.1	3.7	1.4	15.7	14.9	16.5
Northern Ireland	2011	500	12.2	24.1	43.6	16.2	1.9	1.7	0.2	12.2	10.6	13.6
	2015	447	9.7	22.1	52.4	14.3	0.5	1.0	0.0	9.7	12.3	7.3
Oman	2011	1479	9.9	28.3	18.0	27.6	11.6	2.7	1.9	9.9	11.5	8.4
	2015	1313	19.5	30.5	20.0	22.1	5.8	1.3	0.9	19.5	22.0	16.9
Portugal	2011	581	18.2	24.2	35.7	18.5	1.1	1.7	0.7	18.2	17.8	18.6
	2015	670	11.1	26.6	39.1	17.4	1.6	2.7	1.5	11.1	10.2	11.9
Qatar	2011	595	13.9	28.2	34.1	18.1	3.9	1.2	0.6	13.9	14.8	13.2
	2015	752	12.7	27.0	24.7	15.0	17.2	1.1	2.3	12.7	10.6	14.9
Russian Federation	2011	644	19.4	35.4	33.3	9.5	0.4	1.8	0.2	19.4	18.0	20.7
	2015	713	30.0	30.1	30.8	4.7	1.6	2.5	0.3	30.0	30.1	30.0
Saudi Arabia	2011	656	13.9	26.2	28.4	27.2	2.3	1.4	0.7	13.9	18.8	8.9
	2015	608	9.2	4.7	14.4	12.0	56.2	2.1	1.4	9.2	14.1	4.8
Serbia	2011	620	17.3	19.2	29.9	21.3	3.9	6.5	2.0	17.3	17.4	17.3
	2015	570	18.9	23.4	27.7	14.8	9.2	4.1	1.8	18.9	17.2	20.3
Singapore	2011	906	39.6	23.8	22.7	13.3	0.6	0.1	0.0	39.6	42.2	37.2
	2015	932	25.9	29.1	27.2	16.5	0.7	0.3	0.1	25.9	25.1	26.7
Slovak Republic	2011	803	21.6	32.7	29.2	12.1	1.9	2.0	0.5	21.6	19.8	23.2
	2015	836	16.9	31.2	32.4	12.6	3.6	2.8	0.5	16.9	16.9	16.9
Slovenia	2011	637	31.0	23.2	32.8	10.7	1.1	0.6	0.6	31.0	27.4	34.1
	2015	639	34.8	17.7	27.3	10.4	8.0	0.9	0.9	34.8	31.2	38.5
Spain	2011	608	13.9	18.8	33.4	20.4	6.2	5.8	1.5	13.9	11.1	16.6
	2015	1098	13.5	18.6	40.6	21.2	2.5	2.5	1.0	13.5	11.2	15.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_08 (S041195): Physical Science / Applying Type: CR 1 Point
Label: Bulb lights in which circuit

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	28.5	21.7	29.5	15.9	0.9	2.6	1.0	28.5	27.0	30.1
	2015	595	39.5	19.1	23.2	10.4	2.3	4.1	1.4	39.5	39.7	39.3
Turkey	2011	1075	17.0	31.3	28.4	20.0	2.0	1.1	0.2	17.0	18.5	15.8
	2015	923	21.7	20.6	34.7	17.7	3.1	1.9	0.3	21.7	22.2	21.2
United Arab Emirates	2011	2102	13.6	28.8	27.4	22.0	5.0	2.4	0.7	13.6	15.4	11.8
	2015	3023	13.0	34.3	29.7	17.4	2.4	2.2	1.0	13.0	14.0	12.0
United States	2011	1785	29.3	22.0	32.4	13.3	0.8	1.8	0.4	29.3	28.1	30.4
	2015	1433	20.4	25.6	34.0	15.0	1.2	2.2	1.6	20.4	21.5	19.3

International Avg (n=40)	2011	30442	20.3	24.5	30.5	16.7	3.7	3.3	0.9	20.3	19.8	20.8
	2015	30687	19.7	24.2	31.2	14.8	6.6	2.4	1.2	19.7	19.4	20.0

Ontario, Canada	2011	639	19.1	16.6	42.2	17.5	1.6	1.9	1.2	19.1	17.2	21.0
	2015	645	14.1	19.5	44.6	16.4	1.2	2.6	1.5	14.1	13.9	14.4
Quebec, Canada	2011	614	16.4	19.2	40.6	19.5	1.6	1.8	0.9	16.4	13.7	18.8
	2015	388	16.9	20.3	49.5	10.4	0.7	1.4	0.9	16.9	16.6	17.2
Norway (4)	2011	445	15.0	21.7	40.5	19.3	0.3	2.7	0.5	15.0	15.5	14.3
	2015	589	14.0	23.3	38.7	17.1	1.4	2.9	2.7	14.0	17.5	10.8
Abu Dhabi, UAE	2011	603	13.0	31.0	27.7	20.6	4.5	2.8	0.4	13.0	16.7	9.4
	2015	710	8.6	35.4	32.6	17.2	3.2	1.4	1.6	8.6	8.6	8.5
Dubai, UAE	2011	870	18.6	26.1	32.9	18.9	1.3	1.7	0.5	18.6	17.2	19.8
	2015	1074	23.2	27.0	31.0	14.7	1.9	2.0	0.1	23.2	22.7	23.8
Florida, US	2011	391	25.0	19.5	38.6	15.1	0.0	1.3	0.4	25.0	23.9	25.9
	2015	292	15.3	23.7	44.3	13.5	0.3	2.1	0.8	15.3	14.9	15.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09A (S041134A): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 2 dissolves the candy fastest

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	28.6	68.4	1.5	1.4	28.6	30.0	27.3
	2015	867	22.9	73.8	2.8	0.5	22.9	21.3	24.4
Bahrain	2011	586	14.7	79.3	3.5	2.5	14.7	14.1	15.3
	2015	586	28.2	65.3	4.4	2.1	28.2	30.7	25.4
Belgium (Flemish)	2011	689	15.6	83.4	0.9	0.1	15.6	18.8	12.7
	2015	761	55.3	43.0	1.3	0.4	55.3	58.7	52.1
Chile	2011	789	18.9	75.7	2.8	2.6	18.9	19.4	18.5
	2015	678	13.1	77.9	5.7	3.3	13.1	15.5	10.6
Chinese Taipei	2011	614	21.7	77.6	0.6	0.0	21.7	22.5	21.1
	2015	612	52.6	46.8	0.6	0.0	52.6	59.8	46.1
Croatia	2011	659	34.9	60.1	4.1	1.0	34.9	38.5	31.3
	2015	569	42.1	54.9	2.0	1.0	42.1	47.7	37.0
Czech Republic	2011	647	19.9	77.7	2.2	0.2	19.9	17.0	22.7
	2015	740	23.1	71.0	3.8	2.1	23.1	23.1	23.1
Denmark	2011	580	33.4	62.0	3.1	1.6	33.4	33.6	33.1
	2015	528	40.6	52.7	3.5	3.2	40.6	44.4	36.7
England	2011	481	22.1	74.5	2.7	0.7	22.1	23.4	21.0
	2015	578	25.4	72.5	1.1	1.0	25.4	27.5	23.1
Finland	2011	664	19.1	77.5	2.9	0.4	19.1	19.6	18.7
	2015	716	22.4	73.9	2.4	1.3	22.4	23.2	21.7
Georgia	2011	690	21.9	60.6	15.7	1.8	21.9	27.1	17.7
	2015	552	12.2	77.1	6.5	4.2	12.2	14.8	9.5
Germany	2011	569	24.9	72.7	1.3	1.1	24.9	25.0	24.9
	2015	556	24.1	70.7	3.4	1.8	24.1	26.8	21.7
Hong Kong SAR	2011	561	14.0	85.5	0.6	0.0	14.0	16.2	11.9
	2015	507	23.5	75.7	0.8	0.0	23.5	25.3	21.8
Hungary	2011	740	17.1	78.5	2.0	2.4	17.1	16.4	17.7
	2015	716	23.1	73.5	1.8	1.6	23.1	24.2	22.1
Iran, Islamic Rep. of	2011	824	29.0	62.5	6.4	2.1	29.0	32.2	25.9
	2015	539	10.8	77.0	7.8	4.3	10.8	10.4	11.4
Ireland	2011	645	15.9	82.8	1.0	0.3	15.9	15.3	16.5
	2015	620	18.4	80.4	0.9	0.3	18.4	18.1	18.7
Italy	2011	601	21.9	75.7	2.2	0.2	21.9	21.7	22.2
	2015	620	15.3	80.0	3.9	0.7	15.3	15.4	15.3
Japan	2011	634	75.9	23.1	1.0	0.0	75.9	80.8	70.9
	2015	629	45.6	52.7	1.5	0.1	45.6	48.2	43.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09A (S041134A): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 2 dissolves the candy fastest

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	27.2	56.5	14.4	1.9	27.2	27.8	26.6
	2015	672	54.9	42.9	2.1	0.1	54.9	59.1	50.9
Korea, Rep. of	2011	619	38.2	61.0	0.9	0.0	38.2	39.5	37.1
	2015	674	44.2	55.5	0.3	0.0	44.2	44.4	44.1
Kuwait	2011	587	7.8	82.7	7.1	2.5	7.8	11.6	3.3
	2015	507	8.0	80.5	8.0	3.5	8.0	7.6	8.3
Lithuania	2011	693	13.7	84.2	1.9	0.3	13.7	11.8	15.3
	2015	638	65.4	31.9	2.4	0.4	65.4	69.9	61.1
Morocco	2011	1121	3.2	80.8	10.1	5.9	3.2	3.1	3.2
	2015	729	17.5	72.9	6.2	3.3	17.5	21.3	14.4
Netherlands	2011	467	44.9	54.0	0.9	0.2	44.9	48.8	41.3
	2015	646	14.8	83.1	1.1	1.0	14.8	17.2	12.6
New Zealand	2011	804	18.3	79.2	1.2	1.3	18.3	21.0	15.8
	2015	894	23.4	70.8	4.4	1.4	23.4	29.1	17.6
Northern Ireland	2011	500	18.9	80.1	0.7	0.2	18.9	21.2	16.9
	2015	447	18.0	81.1	0.8	0.1	18.0	21.1	15.2
Oman	2011	1479	4.6	88.6	4.5	2.3	4.6	5.5	3.8
	2015	1313	17.6	78.9	2.6	0.9	17.6	19.7	15.5
Portugal	2011	581	28.5	68.4	2.5	0.7	28.5	31.9	24.8
	2015	670	11.2	84.0	2.8	2.0	11.2	9.6	12.9
Qatar	2011	595	12.3	82.5	4.7	0.6	12.3	13.8	11.1
	2015	752	21.3	72.6	3.8	2.3	21.3	23.4	19.1
Russian Federation	2011	644	19.4	78.0	2.1	0.5	19.4	21.7	17.1
	2015	713	48.4	49.3	1.9	0.5	48.4	48.4	48.3
Saudi Arabia	2011	656	18.6	76.5	4.2	0.7	18.6	24.4	12.6
	2015	608	8.9	81.5	8.0	1.6	8.9	12.7	5.4
Serbia	2011	620	40.3	53.1	4.5	2.0	40.3	46.8	35.1
	2015	570	15.5	78.4	3.8	2.3	15.5	14.2	16.6
Singapore	2011	906	35.6	64.1	0.3	0.0	35.6	35.9	35.2
	2015	932	31.6	67.9	0.4	0.1	31.6	32.2	31.0
Slovak Republic	2011	803	14.9	82.3	2.2	0.5	14.9	16.3	13.6
	2015	836	15.0	81.3	2.6	1.1	15.0	13.3	16.7
Slovenia	2011	637	64.8	32.3	2.3	0.6	64.8	70.6	59.7
	2015	639	21.4	74.5	3.0	1.1	21.4	18.0	24.9
Spain	2011	608	24.6	69.6	4.4	1.5	24.6	25.5	23.7
	2015	1098	53.8	42.0	2.8	1.4	53.8	56.6	51.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09A (S041134A): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 2 dissolves the candy fastest

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	27.8	69.7	1.5	1.0	27.8	29.1	26.3
	2015	595	24.4	70.0	4.0	1.6	24.4	24.3	24.5
Turkey	2011	1075	18.2	78.5	3.1	0.2	18.2	19.7	16.9
	2015	923	36.9	60.2	2.6	0.3	36.9	40.7	33.2
United Arab Emirates	2011	2102	13.1	81.4	4.5	1.0	13.1	15.5	10.8
	2015	3023	15.8	79.6	3.5	1.1	15.8	16.6	15.1
United States	2011	1785	46.4	52.2	0.9	0.5	46.4	47.9	45.0
	2015	1433	29.5	66.8	1.8	1.9	29.5	30.0	29.1

International Avg (n=40)	2011	30443	24.8	70.8	3.3	1.1	24.8	26.5	23.1
	2015	30686	27.4	68.1	3.1	1.4	27.4	29.1	25.8

Ontario, Canada	2011	639	36.2	61.3	1.3	1.2	36.2	37.5	34.9
	2015	645	31.8	62.1	4.4	1.7	31.8	37.8	25.8
Quebec, Canada	2011	614	20.2	75.5	3.4	0.9	20.2	24.4	16.5
	2015	388	37.6	56.6	5.0	0.9	37.6	36.7	38.3
Norway (4)	2011	445	14.5	81.8	3.1	0.5	14.5	12.2	17.5
	2015	589	15.0	78.9	2.3	3.7	15.0	16.2	14.0
Abu Dhabi, UAE	2011	603	11.9	82.9	4.4	0.8	11.9	14.8	9.1
	2015	710	12.1	83.1	3.1	1.6	12.1	10.5	13.6
Dubai, UAE	2011	870	16.0	80.6	2.6	0.8	16.0	15.5	16.4
	2015	1074	27.6	69.3	3.0	0.1	27.6	31.0	24.2
Florida, US	2011	391	41.7	56.6	1.3	0.4	41.7	47.2	36.8
	2015	292	31.3	66.4	1.0	1.2	31.3	31.2	31.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09B (S041134B): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 3 dissolves the candy fastest

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	44.1	10.9	41.8	1.4	1.8	44.1	49.1	39.4
	2015	867	44.4	13.9	38.2	2.6	0.9	44.4	45.5	43.5
Bahrain	2011	586	39.7	20.3	34.2	2.8	3.0	39.7	42.2	37.5
	2015	586	43.5	17.6	32.5	3.3	3.1	43.5	48.8	37.5
Belgium (Flemish)	2011	689	29.5	12.1	56.5	1.5	0.3	29.5	32.4	26.8
	2015	761	49.3	20.5	27.6	2.0	0.6	49.3	58.0	41.3
Chile	2011	789	33.4	22.1	36.9	4.5	3.1	33.4	34.6	32.1
	2015	677	28.9	14.4	46.7	5.3	4.7	28.9	32.2	25.4
Chinese Taipei	2011	614	78.2	4.4	16.6	0.6	0.2	78.2	83.3	73.8
	2015	612	64.6	5.0	29.8	0.4	0.2	64.6	68.0	61.4
Croatia	2011	659	70.6	8.1	16.1	3.9	1.3	70.6	74.0	67.3
	2015	569	72.4	7.6	17.1	1.9	1.0	72.4	75.9	69.1
Czech Republic	2011	647	59.6	13.4	24.0	2.4	0.5	59.6	63.7	55.9
	2015	740	51.4	7.3	34.2	4.2	2.9	51.4	53.3	49.4
Denmark	2011	580	55.4	9.4	28.7	4.2	2.3	55.4	58.9	51.7
	2015	528	52.2	2.2	37.6	2.8	5.2	52.2	56.3	47.9
England	2011	481	48.6	9.9	36.9	2.9	1.8	48.6	54.6	43.3
	2015	578	37.3	8.6	51.3	1.9	1.0	37.3	37.5	37.1
Finland	2011	664	53.6	11.7	31.3	2.8	0.5	53.6	57.3	50.6
	2015	716	47.8	13.1	35.2	1.9	1.9	47.8	53.5	42.5
Georgia	2011	688	22.7	21.7	37.2	15.1	3.2	22.7	27.3	18.9
	2015	552	16.3	18.8	52.5	7.9	4.5	16.3	19.1	13.5
Germany	2011	569	46.2	15.1	35.4	2.0	1.4	46.2	48.0	44.4
	2015	556	50.0	11.1	32.6	3.5	2.8	50.0	56.1	44.4
Hong Kong SAR	2011	561	61.4	6.1	31.9	0.6	0.0	61.4	71.2	52.6
	2015	507	64.7	1.7	32.7	0.8	0.2	64.7	72.2	57.9
Hungary	2011	740	40.2	10.5	43.5	2.3	3.5	40.2	40.4	39.9
	2015	716	56.2	8.8	30.7	1.3	3.0	56.2	59.7	52.8
Iran, Islamic Rep. of	2011	824	39.5	21.1	29.5	6.1	3.8	39.5	41.9	37.2
	2015	537	30.4	18.9	37.4	5.6	7.7	30.4	36.1	24.6
Ireland	2011	645	44.6	9.9	43.0	2.0	0.4	44.6	50.6	39.1
	2015	620	44.3	7.3	45.4	1.8	1.2	44.3	47.6	41.5
Italy	2011	601	61.4	8.8	26.5	2.1	1.1	61.4	64.3	58.4
	2015	620	62.6	9.4	22.5	4.2	1.4	62.6	62.6	62.6
Japan	2011	634	80.3	5.4	13.1	0.7	0.5	80.3	80.7	80.0
	2015	629	83.8	3.7	10.4	1.5	0.7	83.8	87.5	80.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09B (S041134B): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 3 dissolves the candy fastest

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	46.9	6.9	26.0	17.9	2.3	46.9	50.1	43.7
	2015	672	59.3	7.0	29.8	3.5	0.4	59.3	64.2	54.7
Korea, Rep. of	2011	619	84.8	4.5	9.4	1.3	0.0	84.8	89.2	81.1
	2015	674	89.9	2.7	7.1	0.2	0.1	89.9	91.9	88.2
Kuwait	2011	587	16.6	23.8	50.5	5.5	3.7	16.6	22.9	9.1
	2015	508	10.9	24.9	52.7	6.3	5.2	10.9	12.8	9.0
Lithuania	2011	693	62.5	11.9	23.7	1.5	0.4	62.5	65.1	60.2
	2015	638	78.4	4.3	13.7	3.1	0.5	78.4	83.6	73.6
Morocco	2011	1120	6.2	17.3	60.4	9.4	6.7	6.2	5.6	6.9
	2015	730	20.4	13.8	55.8	5.0	5.0	20.4	22.3	18.7
Netherlands	2011	467	35.3	13.4	49.5	1.3	0.4	35.3	35.0	35.6
	2015	646	30.9	13.9	51.6	2.4	1.3	30.9	36.2	26.0
New Zealand	2011	804	44.0	13.6	39.5	1.3	1.6	44.0	47.7	40.6
	2015	894	41.6	4.1	47.3	5.5	1.4	41.6	42.2	41.0
Northern Ireland	2011	500	45.3	16.0	37.4	1.0	0.2	45.3	46.6	44.2
	2015	447	45.1	10.3	43.0	1.5	0.1	45.1	46.7	43.5
Oman	2011	1479	23.4	21.5	46.3	5.7	3.1	23.4	29.4	17.8
	2015	1314	36.5	25.0	34.2	3.2	1.2	36.5	40.6	32.3
Portugal	2011	581	42.8	13.7	40.3	1.6	1.6	42.8	43.6	42.0
	2015	670	42.9	9.2	39.9	4.0	4.0	42.9	44.7	41.1
Qatar	2011	595	29.9	25.8	38.4	4.9	1.0	29.9	34.5	26.1
	2015	752	32.5	14.9	45.8	3.2	3.6	32.5	35.4	29.5
Russian Federation	2011	644	66.1	12.2	18.5	2.4	0.8	66.1	71.5	60.8
	2015	713	66.0	10.1	20.8	2.4	0.7	66.0	70.2	61.8
Saudi Arabia	2011	656	36.1	20.9	38.0	3.0	2.0	36.1	51.4	20.5
	2015	608	19.7	13.5	58.5	4.9	3.4	19.7	31.6	9.1
Serbia	2011	620	59.9	9.9	23.1	2.8	4.3	59.9	65.0	55.9
	2015	569	40.4	7.1	43.5	5.7	3.4	40.4	44.5	37.2
Singapore	2011	906	50.4	10.1	38.9	0.6	0.1	50.4	51.5	49.3
	2015	932	42.0	13.9	43.6	0.4	0.2	42.0	42.9	41.2
Slovak Republic	2011	803	57.0	13.0	27.4	1.8	0.8	57.0	58.3	55.7
	2015	836	49.0	10.6	35.7	3.2	1.6	49.0	50.0	48.0
Slovenia	2011	637	69.4	9.4	17.1	3.0	1.1	69.4	70.6	68.4
	2015	639	75.2	4.2	15.6	2.5	2.6	75.2	77.8	72.5
Spain	2011	608	42.6	10.9	39.1	4.8	2.7	42.6	46.8	38.7
	2015	1098	49.6	13.1	31.0	3.6	2.7	49.6	52.8	46.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09B (S041134B): Physical Science / Reasoning Type: CR 1 Point
Label: 1 or 3 dissolves the candy fastest

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	48.3	16.2	32.1	2.0	1.4	48.3	48.6	48.0
	2015	594	53.5	10.5	29.6	3.8	2.6	53.5	55.9	51.2
Turkey	2011	1075	47.8	16.0	32.4	3.2	0.6	47.8	53.5	42.8
	2015	923	51.5	16.0	28.3	3.1	1.1	51.5	58.5	44.6
United Arab Emirates	2011	2102	32.4	21.3	40.7	3.9	1.6	32.4	35.6	29.2
	2015	3023	28.9	20.2	45.8	3.5	1.7	28.9	31.5	26.2
United States	2011	1785	45.0	11.3	41.5	1.6	0.7	45.0	45.6	44.4
	2015	1433	43.6	10.6	40.9	1.9	2.9	43.6	43.5	43.8

International Avg (n=40)	2011	30440	47.5	13.5	33.8	3.5	1.6	47.5	51.1	44.2
	2015	30684	47.7	11.2	35.7	3.1	2.2	47.7	51.2	44.3

Ontario, Canada	2011	639	65.4	12.9	17.9	2.4	1.4	65.4	64.7	66.1
	2015	645	44.1	10.1	37.4	4.0	4.4	44.1	48.0	40.4
Quebec, Canada	2011	614	59.9	14.4	20.2	4.5	1.0	59.9	65.0	55.4
	2015	388	60.9	13.2	19.0	5.1	1.8	60.9	65.5	56.4
Norway (4)	2011	445	31.1	17.5	47.3	2.2	1.9	31.1	31.5	30.4
	2015	589	28.3	19.3	44.0	3.7	4.7	28.3	34.2	23.0
Abu Dhabi, UAE	2011	603	30.2	21.5	43.2	3.7	1.4	30.2	37.6	22.9
	2015	710	23.8	21.3	50.4	2.0	2.5	23.8	25.9	21.9
Dubai, UAE	2011	870	36.5	20.4	38.7	2.9	1.4	36.5	31.4	40.7
	2015	1074	41.9	16.5	37.8	3.6	0.3	41.9	44.1	39.7
Florida, US	2011	391	37.8	12.7	48.2	0.7	0.7	37.8	39.5	36.3
	2015	292	42.3	14.1	41.1	0.7	1.8	42.3	44.3	40.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_09C (S041134C): Physical Science / Reasoning Type: MC Key: D
Label: Method gives the less sweet drink

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	51.1	14.2	8.4	22.0	51.1	2.3	2.0	55.9	46.6
	2015	867	50.0	12.2	10.8	22.2	50.0	3.7	1.1	52.6	47.6
Bahrain	2011	586	36.0	16.6	17.2	24.3	36.0	2.0	3.9	37.0	35.1
	2015	586	35.1	15.8	18.4	24.2	35.1	3.2	3.2	40.1	29.6
Belgium (Flemish)	2011	689	46.8	11.8	12.1	27.1	46.8	1.4	0.8	45.6	47.9
	2015	761	49.2	8.8	12.8	26.2	49.2	2.1	1.0	51.8	46.8
Chile	2011	789	42.7	15.3	11.6	21.6	42.7	5.1	3.6	43.9	41.6
	2015	678	38.5	15.0	13.8	23.4	38.5	4.3	4.9	37.5	39.6
Chinese Taipei	2011	614	68.6	8.4	10.4	11.2	68.6	1.1	0.3	69.9	67.5
	2015	612	68.2	9.3	7.2	14.9	68.2	0.2	0.2	70.3	66.2
Croatia	2011	659	53.9	14.1	12.1	14.9	53.9	3.7	1.3	54.1	53.8
	2015	569	52.1	10.3	13.2	19.8	52.1	3.4	1.2	58.6	46.1
Czech Republic	2011	647	52.3	12.0	12.9	19.8	52.3	2.4	0.5	53.2	51.5
	2015	740	50.3	12.1	10.3	19.3	50.3	4.1	3.8	49.5	51.1
Denmark	2011	580	50.1	9.5	10.4	22.1	50.1	4.8	3.1	52.3	47.9
	2015	528	47.8	9.8	13.2	19.5	47.8	3.0	6.7	43.0	52.8
England	2011	481	50.6	13.9	11.1	19.4	50.6	3.1	2.0	53.2	48.4
	2015	578	58.6	9.9	9.9	17.8	58.6	2.2	1.6	63.5	53.2
Finland	2011	664	63.5	10.8	7.6	14.5	63.5	2.9	0.8	65.3	62.0
	2015	716	60.1	10.3	9.9	14.0	60.1	3.5	2.2	65.1	55.4
Georgia	2011	688	37.0	16.9	15.0	19.2	37.0	8.6	3.3	42.4	32.6
	2015	552	31.4	18.5	16.8	21.4	31.4	7.4	4.5	32.2	30.7
Germany	2011	569	55.1	10.1	5.4	24.2	55.1	3.5	1.7	56.2	54.2
	2015	556	54.4	11.2	7.4	19.4	54.4	4.1	3.5	53.7	55.1
Hong Kong SAR	2011	561	60.2	7.6	12.7	19.1	60.2	0.4	0.0	61.0	59.5
	2015	507	62.2	7.4	11.1	17.7	62.2	1.5	0.2	63.5	60.9
Hungary	2011	740	54.9	10.2	10.3	18.1	54.9	2.3	4.2	57.4	52.7
	2015	716	55.3	8.7	12.9	17.0	55.3	2.6	3.5	59.0	51.8
Iran, Islamic Rep. of	2011	824	38.0	16.4	11.7	23.4	38.0	6.3	4.3	35.6	40.3
	2015	537	32.3	19.3	15.0	18.9	32.3	6.5	8.0	37.8	26.7
Ireland	2011	645	51.3	13.2	12.3	20.8	51.3	1.7	0.6	56.5	46.6
	2015	620	53.9	13.2	10.8	18.8	53.9	0.7	2.6	56.7	51.5
Italy	2011	601	48.7	13.8	9.6	23.5	48.7	2.9	1.5	51.3	46.0
	2015	620	51.5	11.2	10.5	20.1	51.5	4.8	1.8	53.3	49.9
Japan	2011	634	74.2	5.6	4.7	13.8	74.2	1.1	0.6	76.3	72.0
	2015	629	74.6	3.8	4.2	14.8	74.6	1.5	1.1	76.5	72.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_09C (S041134C): Physical Science / Reasoning Type: MC Key: D
Label: Method gives the less sweet drink

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	36.5	13.5	19.2	23.9	36.5	4.2	2.6	36.3	36.8
	2015	672	45.1	11.4	16.4	23.6	45.1	3.2	0.4	45.2	44.9
Korea, Rep. of	2011	619	63.4	11.9	6.3	17.1	63.4	1.3	0.0	70.7	57.2
	2015	674	73.9	4.9	6.2	14.5	73.9	0.4	0.1	75.2	72.7
Kuwait	2011	582	24.9	18.0	22.8	24.4	24.9	6.5	3.4	29.5	19.4
	2015	508	26.0	15.7	20.3	21.8	26.0	10.7	5.5	25.9	26.1
Lithuania	2011	693	58.6	10.9	11.4	17.5	58.6	1.2	0.4	64.5	53.6
	2015	638	57.7	8.6	11.1	19.5	57.7	2.1	1.0	57.2	58.1
Morocco	2011	920	22.7	17.3	27.9	31.9	22.7	0.2	0.1	27.0	18.7
	2015	725	25.2	11.8	22.2	30.2	25.2	5.4	5.2	29.1	22.0
Netherlands	2011	467	56.9	9.0	8.3	24.1	56.9	1.1	0.7	54.9	58.7
	2015	646	56.9	10.7	9.3	19.3	56.9	2.2	1.6	60.4	53.7
New Zealand	2011	804	51.0	14.2	9.9	21.4	51.0	1.8	1.7	55.6	46.8
	2015	894	49.9	13.3	9.6	20.1	49.9	5.3	1.7	52.4	47.4
Northern Ireland	2011	500	51.7	13.1	13.6	19.4	51.7	1.9	0.2	56.3	47.7
	2015	434	55.8	9.8	10.9	22.8	55.8	0.6	0.0	59.8	52.2
Oman	2011	1479	27.5	19.8	21.2	23.3	27.5	4.7	3.6	33.2	22.2
	2015	1311	34.3	18.8	19.9	22.6	34.3	3.0	1.4	36.6	32.0
Portugal	2011	581	55.6	10.5	8.4	21.1	55.6	2.3	2.1	59.4	51.5
	2015	670	50.8	11.6	8.9	18.6	50.8	4.2	6.0	52.9	48.6
Qatar	2011	595	32.1	16.9	20.1	25.5	32.1	4.3	1.2	37.1	28.0
	2015	752	37.8	15.7	16.6	22.2	37.8	3.6	4.0	39.6	35.9
Russian Federation	2011	644	48.9	11.2	12.9	23.8	48.9	2.3	1.0	54.1	43.7
	2015	713	53.4	8.9	11.6	21.9	53.4	3.2	0.9	59.7	47.1
Saudi Arabia	2011	655	31.4	15.4	18.8	29.2	31.4	3.2	2.0	38.5	24.2
	2015	608	25.3	16.0	22.6	24.7	25.3	7.5	3.9	30.4	20.8
Serbia	2011	620	58.7	11.4	7.9	13.2	58.7	3.9	4.9	62.4	55.8
	2015	570	55.5	12.0	8.6	15.9	55.5	4.1	3.8	60.2	51.7
Singapore	2011	906	63.6	10.8	11.0	14.1	63.6	0.3	0.2	65.8	61.5
	2015	932	64.1	11.1	8.1	15.9	64.1	0.6	0.2	68.5	60.0
Slovak Republic	2011	803	56.4	12.5	11.1	17.3	56.4	2.0	0.8	58.9	53.9
	2015	836	52.4	15.4	11.7	15.6	52.4	2.8	2.1	50.1	54.7
Slovenia	2011	637	58.5	11.3	7.6	17.8	58.5	3.3	1.6	60.1	57.1
	2015	639	59.1	11.1	7.8	16.1	59.1	2.8	3.1	62.3	55.7
Spain	2011	608	41.7	13.2	11.5	26.5	41.7	4.5	2.7	39.1	44.2
	2015	1098	46.7	9.6	11.7	25.1	46.7	3.6	3.3	48.1	45.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_09C (S041134C): Physical Science / Reasoning Type: MC Key: D
Label: Method gives the less sweet drink

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	51.7	9.9	12.6	22.0	51.7	2.0	1.8	50.7	52.9
	2015	594	53.9	13.7	8.2	17.3	53.9	3.7	3.1	57.5	50.6
Turkey	2011	1075	42.0	20.3	13.2	22.6	42.0	1.3	0.6	43.7	40.5
	2015	923	43.0	19.3	16.1	18.9	43.0	1.5	1.2	43.0	43.0
United Arab Emirates	2011	2102	37.8	15.3	15.1	26.6	37.8	3.5	1.7	41.0	34.7
	2015	3022	41.7	14.2	14.4	24.0	41.7	3.7	1.9	45.9	37.6
United States	2011	1785	48.9	11.9	10.4	25.8	48.9	1.8	1.2	48.0	49.7
	2015	1433	45.4	13.4	10.7	24.2	45.4	2.4	3.8	45.2	45.6

International Avg (n=40)	2011	30236	48.9	13.0	12.4	21.2	48.9	2.8	1.7	51.3	46.6
	2015	30664	49.5	12.1	12.3	20.1	49.5	3.4	2.6	51.7	47.3

Ontario, Canada	2011	639	47.0	14.0	10.5	24.4	47.0	1.8	2.3	47.8	46.1
	2015	643	49.7	12.6	8.4	21.3	49.7	2.8	5.2	56.1	43.5
Quebec, Canada	2011	615	48.7	12.4	13.3	20.8	48.7	3.9	1.1	50.0	47.4
	2015	386	51.4	12.7	8.1	21.1	51.4	4.4	2.3	53.5	49.4
Norway (4)	2011	445	48.5	14.8	9.2	22.7	48.5	2.7	2.1	46.9	50.7
	2015	589	45.3	11.8	8.0	25.1	45.3	4.0	5.8	47.8	43.1
Abu Dhabi, UAE	2011	603	35.8	16.7	16.7	25.8	35.8	3.6	1.4	38.1	33.6
	2015	710	37.8	15.5	14.6	26.9	37.8	2.5	2.8	41.9	34.0
Dubai, UAE	2011	870	46.9	11.5	12.4	24.7	46.9	2.8	1.7	47.0	46.8
	2015	1073	50.5	14.7	11.5	19.8	50.5	3.1	0.4	55.8	45.3
Florida, US	2011	391	42.7	14.7	12.6	28.3	42.7	1.1	0.7	42.2	43.1
	2015	292	43.7	13.8	12.2	26.7	43.7	1.5	2.1	45.1	42.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_10 (S041191): Physical Science / Knowing Type: MC Key: B
Label: Materials and heat conduction

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	40.7	33.5	40.7	10.3	10.6	2.9	2.0	40.3	41.2
	2015	867	47.3	25.9	47.3	13.2	10.5	1.5	1.7	50.9	44.1
Bahrain	2011	586	50.0	23.9	50.0	9.9	11.1	0.5	4.6	47.5	52.2
	2015	586	57.6	17.5	57.6	11.4	8.7	1.3	3.6	55.7	59.7
Belgium (Flemish)	2011	689	32.3	48.0	32.3	10.3	7.8	0.7	1.0	31.4	33.1
	2015	761	41.3	35.6	41.3	12.6	8.3	1.0	1.2	39.4	43.1
Chile	2011	789	29.6	30.9	29.6	13.8	20.4	1.2	4.1	25.7	33.7
	2015	677	32.2	26.4	32.2	16.0	18.3	1.6	5.7	29.7	34.7
Chinese Taipei	2011	614	68.8	17.1	68.8	6.3	7.2	0.2	0.3	67.5	69.9
	2015	612	73.3	12.6	73.3	6.9	6.0	0.9	0.2	69.4	76.9
Croatia	2011	659	24.7	46.7	24.7	16.4	8.6	2.1	1.5	23.3	26.2
	2015	569	38.4	35.1	38.4	14.2	10.5	0.6	1.2	36.1	40.5
Czech Republic	2011	647	21.2	64.3	21.2	6.7	5.7	1.3	0.8	16.5	25.6
	2015	740	41.6	36.7	41.6	6.4	9.0	2.0	4.3	42.4	40.9
Denmark	2011	580	43.1	31.3	43.1	8.2	12.2	1.9	3.4	42.2	44.1
	2015	528	42.4	32.0	42.4	10.1	6.2	1.3	8.1	39.7	45.1
England	2011	481	48.1	23.3	48.1	13.3	11.8	1.1	2.4	41.4	53.9
	2015	578	53.7	17.7	53.7	13.7	11.6	1.3	2.0	52.9	54.5
Finland	2011	664	60.7	27.7	60.7	4.9	5.3	0.4	1.0	52.6	67.5
	2015	716	61.3	27.9	61.3	5.5	1.8	0.8	2.8	59.8	62.7
Georgia	2011	690	46.2	13.4	46.2	18.3	16.7	1.8	3.6	45.3	47.0
	2015	552	56.1	11.3	56.1	13.5	13.7	0.7	4.6	57.5	54.6
Germany	2011	569	43.9	30.1	43.9	10.8	11.9	1.3	2.0	41.5	46.2
	2015	556	48.9	22.9	48.9	8.2	13.2	2.9	4.0	43.7	53.6
Hong Kong SAR	2011	561	89.2	5.1	89.2	2.8	2.8	0.1	0.0	88.6	89.8
	2015	507	87.0	5.6	87.0	3.8	3.2	0.2	0.2	88.8	85.4
Hungary	2011	739	39.5	30.6	39.5	14.8	9.7	1.1	4.4	34.4	43.9
	2015	716	51.0	23.0	51.0	12.0	8.6	1.9	3.6	46.3	55.6
Iran, Islamic Rep. of	2011	824	25.1	17.0	25.1	30.2	20.6	2.1	5.0	23.7	26.5
	2015	538	26.3	17.3	26.3	22.4	23.5	1.1	9.4	28.0	24.6
Ireland	2011	645	40.3	34.6	40.3	13.4	10.5	0.4	0.8	40.4	40.2
	2015	620	44.2	28.0	44.2	15.5	8.8	0.7	2.8	52.0	37.3
Italy	2011	601	44.7	38.7	44.7	5.9	7.1	1.8	1.8	46.4	43.0
	2015	620	44.8	34.0	44.8	7.6	8.7	2.3	2.5	46.4	43.3
Japan	2011	634	78.1	14.0	78.1	2.2	5.1	0.0	0.6	78.3	77.8
	2015	629	79.9	12.4	79.9	2.6	3.6	0.2	1.3	82.2	77.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_10 (S041191): Physical Science / Knowing Type: MC Key: B
Label: Materials and heat conduction

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	37.4	29.7	37.4	18.0	10.7	1.6	2.6	35.0	39.9
	2015	672	56.7	16.6	56.7	16.2	8.7	1.1	0.8	56.4	56.9
Korea, Rep. of	2011	619	95.1	2.1	95.1	1.6	1.1	0.1	0.0	94.6	95.5
	2015	674	70.0	9.9	70.0	13.2	6.6	0.3	0.1	65.9	73.7
Kuwait	2011	581	33.8	22.2	33.8	17.3	15.4	7.4	3.8	32.1	35.9
	2015	508	40.5	17.6	40.5	20.8	9.7	5.4	6.1	38.6	42.3
Lithuania	2011	693	36.8	35.9	36.8	14.4	11.8	0.8	0.4	37.3	36.3
	2015	638	43.6	28.3	43.6	14.3	11.7	1.1	1.0	40.1	46.9
Morocco	2011	925	38.6	25.0	38.6	21.1	13.5	1.6	0.3	33.5	43.3
	2015	726	54.6	11.0	54.6	14.8	11.2	3.1	5.3	49.9	58.4
Netherlands	2011	467	35.1	32.1	35.1	15.5	16.1	0.7	0.7	33.1	36.9
	2015	646	34.1	31.5	34.1	15.1	14.4	2.8	2.1	32.0	35.9
New Zealand	2011	804	26.3	47.2	26.3	12.7	11.3	0.7	1.7	25.9	26.6
	2015	894	39.9	31.6	39.9	14.1	11.5	1.0	1.9	38.0	41.9
Northern Ireland	2011	500	36.4	33.9	36.4	17.0	11.6	0.8	0.2	35.5	37.2
	2015	439	37.8	28.7	37.8	21.4	12.2	0.0	0.0	39.9	35.8
Oman	2011	1479	50.2	15.3	50.2	14.8	13.7	2.0	4.0	50.1	50.3
	2015	1311	70.5	8.9	70.5	10.0	7.1	1.9	1.6	73.6	67.4
Portugal	2011	581	33.8	24.9	33.8	22.2	15.8	1.0	2.2	33.5	34.2
	2015	670	30.4	16.6	30.4	30.4	12.8	1.4	8.4	26.5	34.2
Qatar	2011	595	51.9	22.7	51.9	9.5	11.9	2.6	1.4	54.5	49.7
	2015	752	52.5	19.5	52.5	12.1	10.1	1.3	4.5	50.0	55.1
Russian Federation	2011	644	56.9	19.3	56.9	14.6	7.3	0.9	1.0	55.3	58.4
	2015	713	53.7	19.1	53.7	15.7	9.1	1.5	0.9	52.2	55.1
Saudi Arabia	2011	655	52.6	18.9	52.6	14.6	9.9	2.0	2.0	57.1	48.0
	2015	607	45.5	17.2	45.5	19.0	11.4	2.6	4.3	50.1	41.4
Serbia	2011	620	57.1	22.0	57.1	8.2	4.4	2.6	5.7	54.0	59.5
	2015	570	67.5	16.4	67.5	7.0	3.6	1.5	4.1	67.3	67.6
Singapore	2011	906	92.0	3.8	92.0	1.5	2.4	0.0	0.2	90.2	93.7
	2015	932	94.2	1.6	94.2	1.8	1.6	0.6	0.2	95.4	93.2
Slovak Republic	2011	803	41.5	42.6	41.5	8.7	5.3	1.1	0.8	38.7	44.2
	2015	836	41.2	35.8	41.2	13.2	6.0	1.4	2.4	36.4	45.8
Slovenia	2011	637	48.4	25.8	48.4	12.9	9.8	1.2	1.8	41.4	54.4
	2015	639	54.1	18.6	54.1	12.0	10.3	1.2	3.8	51.7	56.6
Spain	2011	608	36.5	27.9	36.5	16.6	14.2	1.6	3.2	34.3	38.6
	2015	1098	48.0	19.4	48.0	13.2	13.1	1.3	4.9	45.0	50.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S05_10 (S041191): Physical Science / Knowing Type: MC Key: B
Label: Materials and heat conduction

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	41.8	41.4	41.8	5.5	7.9	1.1	2.3	40.6	43.2
	2015	595	58.1	22.7	58.1	7.1	5.1	3.2	3.7	58.6	58.0
Turkey	2011	1075	36.6	17.2	36.6	20.6	24.7	0.3	0.6	33.7	39.0
	2015	923	44.1	17.0	44.1	17.4	19.8	0.5	1.2	40.6	47.4
United Arab Emirates	2011	2102	43.1	25.1	43.1	14.2	13.7	2.1	1.8	42.2	43.9
	2015	3022	50.2	20.6	50.2	14.9	10.9	1.5	2.0	49.1	51.3
United States	2011	1785	41.9	39.3	41.9	7.7	8.1	1.2	1.8	37.6	45.8
	2015	1433	51.6	28.2	51.6	6.9	6.9	1.9	4.4	49.6	53.8

International Avg (n=40)	2011	30241	46.2	27.6	46.2	12.2	10.6	1.4	1.9	44.4	47.9
	2015	30670	51.6	21.5	51.6	12.6	9.7	1.5	3.1	50.7	52.6

Ontario, Canada	2011	639	29.0	44.5	29.0	12.7	9.3	1.3	3.2	27.5	30.5
	2015	644	43.7	30.3	43.7	9.6	8.7	1.6	6.0	44.7	42.6
Quebec, Canada	2011	615	36.4	43.7	36.4	7.1	10.3	1.3	1.2	31.8	40.5
	2015	387	39.7	42.0	39.7	9.0	6.2	0.8	2.3	45.5	34.0
Norway (4)	2011	445	36.8	37.5	36.8	10.3	11.8	0.8	2.9	32.6	42.3
	2015	589	44.4	24.6	44.4	11.0	10.8	2.5	6.7	45.1	43.7
Abu Dhabi, UAE	2011	603	42.9	24.1	42.9	14.8	14.6	2.1	1.4	42.5	43.3
	2015	709	44.5	25.9	44.5	14.5	10.1	2.1	2.8	42.1	46.8
Dubai, UAE	2011	870	41.4	26.6	41.4	16.1	12.3	2.1	1.7	40.8	41.8
	2015	1074	59.4	18.2	59.4	13.6	7.6	0.6	0.6	60.1	58.7
Florida, US	2011	391	41.7	40.4	41.7	6.8	8.3	1.6	1.2	39.0	44.0
	2015	292	55.7	24.6	55.7	6.9	6.7	3.3	2.8	50.8	61.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S05_l1 (S041107): Earth Science / Knowing Type: CR 2 Points
Label: Two planets orbit the sun

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	72.5	13.9	8.0	3.6	2.1	86.3	72.5	73.7	71.3
	2015	867	60.4	23.3	9.8	4.5	2.0	83.7	60.4	64.7	56.7
Bahrain	2011	586	58.1	14.0	17.3	5.5	5.1	72.1	58.1	62.5	54.1
	2015	586	60.4	10.2	19.8	5.4	4.2	70.6	60.4	60.1	60.7
Belgium (Flemish)	2011	689	56.9	27.4	11.3	3.4	1.0	84.3	56.9	57.3	56.6
	2015	761	49.0	32.8	12.5	3.9	1.8	81.9	49.0	48.5	49.5
Chile	2011	789	85.9	4.1	1.2	4.2	4.6	89.9	85.9	83.0	88.8
	2015	677	68.8	11.4	5.4	7.7	6.6	80.3	68.8	67.3	70.5
Chinese Taipei	2011	614	56.7	15.3	18.8	8.9	0.3	72.0	56.7	54.4	58.7
	2015	612	47.7	24.9	18.3	8.2	0.8	72.6	47.7	44.9	50.3
Croatia	2011	659	58.0	13.4	11.5	15.3	1.8	71.3	58.0	56.5	59.5
	2015	569	57.7	19.4	11.3	10.2	1.4	77.0	57.7	54.6	60.5
Czech Republic	2011	647	68.2	13.9	6.7	10.1	1.1	82.1	68.2	67.9	68.5
	2015	740	66.2	11.7	6.7	10.3	5.1	77.9	66.2	68.1	64.1
Denmark	2011	580	57.8	19.9	12.1	6.7	3.6	77.7	57.8	56.3	59.4
	2015	528	50.4	20.3	16.0	4.7	8.6	70.7	50.4	47.6	53.3
England	2011	481	66.0	16.1	10.8	4.5	2.6	82.1	66.0	67.3	64.8
	2015	578	66.4	20.9	7.7	2.8	2.2	87.3	66.4	64.8	68.1
Finland	2011	664	59.6	20.3	10.8	8.1	1.2	79.9	59.6	60.6	58.7
	2015	716	51.3	24.4	15.2	5.8	3.2	75.7	51.3	56.4	46.5
Georgia	2011	690	63.5	8.5	8.2	15.8	4.0	72.0	63.5	66.2	61.2
	2015	552	64.5	7.8	11.6	11.2	4.9	72.3	64.5	65.3	63.8
Germany	2011	569	57.9	19.3	11.0	9.3	2.5	77.2	57.9	52.6	62.9
	2015	556	49.6	24.1	13.2	8.6	4.5	73.7	49.6	47.9	51.2
Hong Kong SAR	2011	561	64.9	19.3	11.4	4.4	0.0	84.1	64.9	60.5	68.9
	2015	507	60.7	20.4	14.1	4.7	0.2	81.1	60.7	58.6	62.5
Hungary	2011	740	68.5	12.1	7.7	7.0	4.7	80.6	68.5	69.8	67.4
	2015	716	61.3	17.9	11.6	5.3	3.9	79.3	61.3	59.9	62.7
Iran, Islamic Rep. of	2011	824	72.1	6.8	10.0	5.4	5.6	78.9	72.1	76.5	67.8
	2015	538	60.8	7.2	12.0	10.4	9.6	67.9	60.8	63.8	57.7
Ireland	2011	645	76.4	11.4	7.5	4.0	0.8	87.7	76.4	68.7	83.3
	2015	620	66.3	22.6	5.4	2.8	2.9	88.9	66.3	66.9	65.7
Italy	2011	601	64.6	13.7	7.8	11.7	2.2	78.3	64.6	62.9	66.3
	2015	620	55.8	16.1	11.7	12.9	3.5	71.9	55.8	53.1	58.3
Japan	2011	634	56.7	22.0	15.8	4.8	0.6	78.7	56.7	51.0	62.6
	2015	629	36.9	30.9	25.2	5.7	1.3	67.8	36.9	29.1	44.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_l1 (S041107): Earth Science / Knowing Type: CR 2 Points
Label: Two planets orbit the sun

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	55.0	15.8	15.8	9.9	3.4	70.8	55.0	52.6	57.5
	2015	672	60.2	15.8	18.3	5.0	0.8	75.9	60.2	58.9	61.4
Korea, Rep. of	2011	619	63.9	16.1	16.2	3.7	0.1	80.0	63.9	59.6	67.6
	2015	674	66.5	21.2	10.8	1.4	0.1	87.7	66.5	54.7	77.2
Kuwait	2011	587	35.1	13.4	34.4	11.7	5.4	48.5	35.1	39.4	30.1
	2015	508	24.9	16.9	36.4	15.4	6.4	41.8	24.9	27.3	22.7
Lithuania	2011	693	67.9	14.2	9.3	8.2	0.4	82.1	67.9	65.8	69.7
	2015	638	56.7	20.1	11.5	10.0	1.7	76.8	56.7	55.3	58.0
Morocco	2011	1121	3.6	8.6	45.2	34.9	7.8	12.2	3.6	2.7	4.6
	2015	728	9.5	10.8	57.6	16.2	6.0	20.2	9.5	11.7	7.6
Netherlands	2011	467	71.0	20.8	5.9	1.5	0.9	91.7	71.0	69.4	72.5
	2015	646	47.7	34.1	13.1	2.3	2.8	81.8	47.7	47.9	47.5
New Zealand	2011	804	69.3	16.8	9.2	2.8	1.9	86.2	69.3	66.2	72.1
	2015	894	58.0	23.9	12.9	3.3	1.9	81.9	58.0	54.8	61.2
Northern Ireland	2011	500	68.6	15.0	9.5	6.3	0.7	83.6	68.6	67.8	69.3
	2015	447	58.0	25.7	10.1	6.2	0.1	83.6	58.0	60.9	55.3
Oman	2011	1479	46.8	14.9	24.0	9.7	4.6	61.7	46.8	48.6	45.2
	2015	1313	49.5	12.7	29.3	7.0	1.6	62.1	49.5	53.1	45.8
Portugal	2011	581	83.0	5.5	4.4	4.2	2.8	88.5	83.0	82.0	84.0
	2015	670	79.1	2.8	4.1	4.9	9.1	81.9	79.1	78.4	79.9
Qatar	2011	595	46.1	11.7	29.6	10.8	1.8	57.8	46.1	42.0	49.4
	2015	752	43.0	16.2	26.5	9.4	4.9	59.2	43.0	42.7	43.3
Russian Federation	2011	644	77.7	9.0	3.9	8.3	1.1	86.7	77.7	78.1	77.2
	2015	713	76.6	8.5	6.4	7.5	1.0	85.1	76.6	76.7	76.5
Saudi Arabia	2011	656	52.4	13.8	24.9	6.3	2.7	66.2	52.4	56.2	48.5
	2015	608	38.3	12.5	33.4	10.4	5.4	50.8	38.3	42.4	34.6
Serbia	2011	620	49.3	14.3	11.0	19.1	6.3	63.6	49.3	44.7	53.0
	2015	570	41.2	14.5	17.2	23.0	4.2	55.7	41.2	39.4	42.7
Singapore	2011	906	55.3	22.2	20.3	1.9	0.2	77.6	55.3	54.1	56.5
	2015	932	43.7	33.1	20.3	2.5	0.3	76.8	43.7	43.0	44.3
Slovak Republic	2011	803	84.0	5.6	5.1	4.5	0.9	89.5	84.0	81.1	86.7
	2015	836	73.9	7.0	7.8	8.6	2.6	81.0	73.9	73.1	74.7
Slovenia	2011	637	47.0	17.7	17.7	15.7	1.8	64.7	47.0	41.5	51.7
	2015	639	54.6	18.0	16.7	6.8	3.9	72.6	54.6	53.5	55.7
Spain	2011	608	69.2	9.0	9.6	8.8	3.4	78.2	69.2	65.7	72.4
	2015	1098	71.5	8.3	9.0	6.2	5.1	79.8	71.5	69.7	73.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_11 (S041107): Earth Science / Knowing Type: CR 2 Points
Label: Two planets orbit the sun

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	69.0	15.5	5.4	7.7	2.3	84.5	69.0	71.1	66.7
	2015	595	62.1	20.4	7.8	5.6	4.2	82.4	62.1	60.6	63.7
Turkey	2011	1075	34.9	14.0	41.2	9.4	0.6	48.8	34.9	35.0	34.8
	2015	923	27.6	20.6	43.5	7.0	1.2	48.2	27.6	28.0	27.2
United Arab Emirates	2011	2102	59.8	12.2	19.9	6.1	1.9	72.1	59.8	62.7	57.1
	2015	3023	57.8	10.3	22.6	6.9	2.4	68.2	57.8	57.2	58.6
United States	2011	1785	77.4	12.6	6.1	2.0	1.9	90.0	77.4	75.0	79.7
	2015	1433	68.1	16.8	8.3	1.9	5.0	84.9	68.1	66.1	70.2

International Avg (n=40)	2011	30443	61.3	14.3	13.9	8.2	2.4	75.5	61.3	60.2	62.2
	2015	30684	55.1	17.9	16.3	7.3	3.4	73.0	55.1	54.4	55.7

Ontario, Canada	2011	639	66.5	17.8	7.7	4.2	3.8	84.3	66.5	63.5	69.6
	2015	645	54.4	24.7	9.6	5.0	6.3	79.2	54.4	51.9	57.2
Quebec, Canada	2011	613	72.9	14.9	7.1	3.6	1.5	87.8	72.9	68.9	76.4
	2015	388	74.2	12.7	8.1	2.3	2.7	86.9	74.2	71.4	76.8
Norway (4)	2011	445	70.4	12.4	6.8	7.3	3.1	82.8	70.4	68.0	73.6
	2015	589	64.1	16.3	5.6	6.4	7.6	80.4	64.1	64.0	64.2
Abu Dhabi, UAE	2011	603	53.3	13.0	26.2	5.9	1.6	66.4	53.3	58.4	48.4
	2015	710	43.8	9.6	34.6	8.3	3.7	53.4	43.8	42.0	45.4
Dubai, UAE	2011	870	65.9	12.4	13.6	6.2	1.8	78.4	65.9	63.6	67.9
	2015	1074	71.9	12.0	12.5	2.9	0.7	83.9	71.9	70.6	73.1
Florida, US	2011	391	82.0	10.1	4.7	1.7	1.5	92.1	82.0	77.6	85.9
	2015	292	65.7	18.7	10.2	1.0	4.4	84.4	65.7	66.6	64.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_12 (S041113): Earth Science / Reasoning Type: CR 1 Point
Label: Why shadows changed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	877	53.6	39.4	4.2	2.8	53.6	54.5	52.7
	2015	867	46.0	49.6	1.6	2.7	46.0	49.1	43.3
Bahrain	2011	586	38.8	50.1	5.2	6.0	38.8	40.8	37.0
	2015	586	39.1	51.8	3.3	5.7	39.1	44.4	33.2
Belgium (Flemish)	2011	689	40.2	56.8	1.2	1.8	40.2	42.1	38.4
	2015	761	54.0	40.7	3.3	2.0	54.0	49.7	57.9
Chile	2011	789	31.1	57.1	5.3	6.5	31.1	27.8	34.5
	2015	676	31.1	55.4	4.8	8.7	31.1	27.7	34.6
Chinese Taipei	2011	614	51.3	45.2	2.4	1.2	51.3	52.0	50.6
	2015	612	45.6	51.0	1.4	2.0	45.6	46.2	45.1
Croatia	2011	659	38.2	55.1	4.5	2.2	38.2	40.8	35.6
	2015	569	42.7	54.0	1.3	2.0	42.7	40.2	45.0
Czech Republic	2011	647	39.4	54.6	4.2	1.9	39.4	35.0	43.6
	2015	740	30.6	56.1	5.8	7.5	30.6	28.7	32.5
Denmark	2011	580	52.9	40.0	3.0	4.1	52.9	52.0	53.9
	2015	528	44.1	44.1	2.6	9.1	44.1	37.4	51.2
England	2011	481	35.0	58.9	2.8	3.2	35.0	35.4	34.7
	2015	578	25.0	71.3	1.3	2.5	25.0	26.4	23.4
Finland	2011	664	54.6	39.4	3.6	2.4	54.6	56.8	52.8
	2015	716	57.5	35.9	2.1	4.6	57.5	59.2	55.9
Georgia	2011	688	27.0	49.1	14.7	9.2	27.0	27.8	26.4
	2015	552	30.5	49.4	12.5	7.6	30.5	29.1	31.9
Germany	2011	569	31.5	58.9	6.2	3.3	31.5	29.7	33.2
	2015	556	40.1	48.1	5.6	6.2	40.1	35.7	44.1
Hong Kong SAR	2011	561	52.2	42.8	4.1	0.8	52.2	53.6	51.0
	2015	507	59.3	36.9	2.1	1.7	59.3	61.0	57.8
Hungary	2011	739	36.4	53.8	4.5	5.4	36.4	33.7	38.7
	2015	716	38.6	52.2	4.4	4.7	38.6	33.9	43.3
Iran, Islamic Rep. of	2011	824	20.7	57.4	14.7	7.3	20.7	17.6	23.7
	2015	538	19.0	58.1	10.9	12.0	19.0	15.7	22.2
Ireland	2011	645	39.3	54.4	5.1	1.2	39.3	33.0	45.0
	2015	620	36.8	59.1	1.1	3.0	36.8	36.9	36.7
Italy	2011	601	30.2	61.2	5.2	3.4	30.2	27.1	33.5
	2015	618	29.4	61.7	3.8	5.2	29.4	30.6	28.3
Japan	2011	634	81.2	17.1	0.5	1.3	81.2	77.9	84.6
	2015	629	89.0	8.0	0.9	2.1	89.0	90.3	87.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_12 (S041113): Earth Science / Reasoning Type: CR 1 Point
Label: Why shadows changed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	46.4	39.6	7.3	6.7	46.4	45.3	47.5
	2015	672	70.0	24.6	3.3	2.2	70.0	72.1	68.0
Korea, Rep. of	2011	619	53.1	46.4	0.3	0.3	53.1	51.7	54.2
	2015	674	67.3	32.2	0.5	0.1	67.3	66.0	68.4
Kuwait	2011	586	11.1	64.1	16.2	8.6	11.1	11.7	10.4
	2015	508	14.3	63.1	12.9	9.7	14.3	16.2	12.5
Lithuania	2011	693	33.3	62.8	2.8	1.1	33.3	33.2	33.5
	2015	638	39.5	54.7	2.9	2.9	39.5	37.0	41.8
Morocco	2011	1119	7.6	46.2	25.4	20.9	7.6	5.5	9.4
	2015	727	17.6	60.5	13.2	8.7	17.6	17.8	17.5
Netherlands	2011	467	37.0	60.4	1.3	1.3	37.0	32.7	41.1
	2015	641	41.5	52.7	2.6	3.2	41.5	41.9	41.1
New Zealand	2011	804	37.0	57.0	3.4	2.6	37.0	35.7	38.2
	2015	894	40.4	56.3	1.1	2.1	40.4	37.3	43.6
Northern Ireland	2011	500	22.4	73.9	2.3	1.5	22.4	18.8	25.6
	2015	447	24.3	72.1	2.6	1.0	24.3	23.7	24.8
Oman	2011	1479	21.7	58.5	11.3	8.5	21.7	22.1	21.4
	2015	1313	30.7	59.4	7.1	2.8	30.7	33.8	27.5
Portugal	2011	581	40.1	54.2	2.0	3.7	40.1	35.3	45.2
	2015	670	38.8	48.2	2.9	10.1	38.8	34.2	43.3
Qatar	2011	595	25.6	59.0	11.2	4.2	25.6	28.9	22.9
	2015	752	28.4	59.3	5.0	7.3	28.4	30.4	26.3
Russian Federation	2011	644	47.3	45.5	4.5	2.6	47.3	47.2	47.4
	2015	713	48.3	46.9	2.9	1.9	48.3	48.4	48.2
Saudi Arabia	2011	656	29.7	54.4	10.3	5.7	29.7	28.3	31.1
	2015	608	22.2	56.8	12.4	8.7	22.2	27.2	17.7
Serbia	2011	620	40.3	46.6	4.9	8.3	40.3	42.9	38.2
	2015	570	55.0	33.0	5.5	6.5	55.0	58.5	52.1
Singapore	2011	906	75.8	23.1	0.4	0.7	75.8	76.4	75.2
	2015	932	67.3	31.8	0.3	0.6	67.3	69.7	65.1
Slovak Republic	2011	803	33.1	59.0	6.0	1.9	33.1	28.4	37.7
	2015	836	35.6	55.8	4.2	4.3	35.6	33.8	37.4
Slovenia	2011	637	42.8	48.8	5.2	3.2	42.8	38.9	46.1
	2015	639	58.6	34.5	2.4	4.5	58.6	52.1	65.3
Spain	2011	608	23.5	66.1	5.6	4.9	23.5	22.5	24.4
	2015	1098	51.6	39.8	2.4	6.2	51.6	47.0	56.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S05_12 (S041113): Earth Science / Reasoning Type: CR 1 Point
Label: Why shadows changed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	686	34.6	56.6	5.6	3.2	34.6	36.6	32.2
	2015	595	43.4	46.5	4.4	5.7	43.4	49.6	37.7
Turkey	2011	1075	30.2	63.7	4.1	1.9	30.2	28.1	31.9
	2015	923	45.6	48.4	3.8	2.1	45.6	46.1	45.2
United Arab Emirates	2011	2102	20.4	65.0	10.8	3.8	20.4	20.4	20.4
	2015	3023	25.8	64.7	5.3	4.1	25.8	25.8	25.9
United States	2011	1785	38.6	56.8	2.4	2.2	38.6	35.2	41.8
	2015	1433	42.3	50.9	1.5	5.3	42.3	39.3	45.5

International Avg (n=40)	2011	30437	37.6	52.5	5.9	4.0	37.6	36.6	38.6
	2015	30675	41.7	49.4	4.2	4.7	41.7	41.3	42.1

Ontario, Canada	2011	639	45.7	46.3	3.1	4.8	45.7	42.5	49.1
	2015	645	34.4	55.8	2.0	7.8	34.4	37.3	31.7
Quebec, Canada	2011	614	49.0	45.6	2.8	2.5	49.0	49.7	48.4
	2015	388	39.7	53.1	3.9	3.2	39.7	40.0	39.4
Norway (4)	2011	445	25.3	64.3	6.3	4.0	25.3	24.4	26.5
	2015	589	24.6	60.8	4.9	9.8	24.6	26.2	23.1
Abu Dhabi, UAE	2011	603	19.4	67.6	9.6	3.4	19.4	21.0	17.9
	2015	710	19.5	69.6	5.0	5.9	19.5	19.1	19.9
Dubai, UAE	2011	870	23.9	63.7	8.5	3.9	23.9	21.9	25.6
	2015	1074	37.0	59.1	2.4	1.5	37.0	36.0	38.0
Florida, US	2011	391	35.7	60.1	2.2	2.0	35.7	33.3	37.8
	2015	292	41.7	51.9	1.3	5.1	41.7	38.8	44.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_01 (S051185): Life Science / Knowing Type: MC Key: C
Label: Water in tray and mosquitoes

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	63.1	13.6	15.4	63.1	6.9	0.5	0.5	63.4	62.9
	2015	869	57.2	20.0	13.6	57.2	6.6	2.1	0.5	54.9	59.3
Bahrain	2011	574	29.3	26.2	31.9	29.3	11.0	1.1	0.6	28.3	30.3
	2015	586	31.0	23.8	30.1	31.0	13.4	1.3	0.4	34.9	27.1
Belgium (Flemish)	2011	683	56.2	13.4	22.6	56.2	7.3	0.6	0.0	55.3	57.0
	2015	761	55.6	11.1	23.8	55.6	9.0	0.6	0.0	54.6	56.6
Chile	2011	794	40.7	21.8	25.2	40.7	9.6	1.9	0.8	37.0	45.0
	2015	680	39.2	22.1	27.3	39.2	7.6	2.5	1.2	37.1	41.5
Chinese Taipei	2011	603	84.0	1.7	10.6	84.0	3.2	0.6	0.0	81.0	86.4
	2015	617	87.5	1.7	8.7	87.5	2.1	0.1	0.0	87.2	87.8
Croatia	2011	649	48.7	16.8	25.0	48.7	7.3	2.1	0.0	44.8	52.3
	2015	560	51.9	19.7	18.9	51.9	8.8	0.7	0.1	52.9	50.8
Czech Republic	2011	647	67.8	10.6	14.6	67.8	5.6	1.2	0.2	67.8	67.8
	2015	742	63.4	14.9	16.3	63.4	4.6	0.8	0.0	65.2	61.4
Denmark	2011	577	65.4	8.8	13.8	65.4	8.8	2.6	0.6	65.6	65.2
	2015	525	62.6	12.0	17.3	62.6	6.0	1.4	0.7	63.2	62.0
England	2011	494	51.6	18.1	18.7	51.6	9.2	1.9	0.4	53.2	50.0
	2015	577	56.0	15.4	17.7	56.0	9.7	1.2	0.0	55.5	56.4
Finland	2011	659	77.4	8.0	10.4	77.4	2.9	1.1	0.1	77.6	77.3
	2015	723	75.4	8.3	10.2	75.4	3.4	2.4	0.3	79.8	71.3
Georgia	2011	677	32.5	23.8	31.3	32.5	9.5	2.4	0.5	33.6	31.6
	2015	556	28.2	24.2	32.1	28.2	13.0	2.3	0.1	27.3	29.1
Germany	2011	567	60.9	14.4	18.2	60.9	4.9	1.6	0.0	58.4	63.3
	2015	563	62.9	10.9	17.6	62.9	5.6	3.0	0.0	61.2	64.4
Hong Kong SAR	2011	557	80.8	2.8	9.3	80.8	6.9	0.3	0.0	76.5	84.2
	2015	516	79.4	1.4	10.4	79.4	8.8	0.0	0.0	77.8	80.8
Hungary	2011	745	71.0	10.0	11.0	71.0	6.5	0.9	0.5	71.5	70.6
	2015	717	69.3	13.5	9.3	69.3	6.1	1.7	0.1	69.4	69.1
Iran, Islamic Rep. of	2011	825	30.3	20.8	34.7	30.3	10.3	3.6	0.3	30.0	30.5
	2015	541	26.7	23.3	29.8	26.7	11.6	6.3	2.2	26.0	27.7
Ireland	2011	647	44.7	23.6	20.9	44.7	10.1	0.6	0.1	45.7	43.8
	2015	622	56.1	14.4	20.3	56.1	8.6	0.4	0.2	59.9	52.8
Italy	2011	597	51.5	22.5	17.7	51.5	6.2	2.1	0.0	51.5	51.6
	2015	608	48.2	24.6	16.2	48.2	8.9	2.0	0.1	45.7	50.4
Japan	2011	627	74.9	9.4	12.6	74.9	2.4	0.5	0.1	76.1	73.7
	2015	622	68.0	13.7	14.0	68.0	3.5	0.7	0.1	67.5	68.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_01 (S051185): Life Science / Knowing Type: MC Key: C
Label: Water in tray and mosquitoes

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	36.1	18.1	27.3	36.1	16.1	2.5	0.0	33.9	38.1
	2015	664	44.6	16.8	24.3	44.6	13.2	1.1	0.0	39.6	49.2
Korea, Rep. of	2011	619	75.0	9.4	12.5	75.0	2.8	0.2	0.0	74.7	75.3
	2015	673	80.1	8.1	8.9	80.1	2.7	0.2	0.0	75.7	84.3
Kuwait	2011	583	18.3	33.5	30.9	18.3	12.0	4.9	0.4	16.6	20.4
	2015	503	18.2	34.4	28.5	18.2	9.8	7.5	1.6	19.0	17.3
Lithuania	2011	670	56.3	16.5	20.9	56.3	4.7	1.7	0.0	55.0	57.4
	2015	638	52.1	18.0	24.4	52.1	4.5	0.9	0.0	52.8	51.5
Morocco	2011	1029	20.7	29.0	36.4	20.7	9.9	3.5	0.5	17.1	24.5
	2015	715	26.1	27.3	32.1	26.1	10.6	3.6	0.3	24.4	27.6
Netherlands	2011	461	66.4	12.1	14.7	66.4	6.1	0.4	0.2	63.9	69.5
	2015	635	65.0	11.8	16.5	65.0	5.4	1.0	0.3	65.7	64.4
New Zealand	2011	814	46.3	19.7	25.5	46.3	7.0	1.1	0.4	47.4	45.1
	2015	896	53.4	18.6	18.1	53.4	9.0	1.0	0.0	54.1	52.7
Northern Ireland	2011	503	46.1	20.1	23.8	46.1	9.2	0.8	0.0	47.3	45.1
	2015	442	50.2	20.3	19.2	50.2	9.2	1.0	0.0	48.9	51.5
Oman	2011	1487	25.7	28.5	31.0	25.7	10.9	3.4	0.5	23.5	27.7
	2015	1305	27.4	29.5	30.8	27.4	10.2	1.9	0.3	26.1	28.6
Portugal	2011	580	28.1	20.7	41.6	28.1	8.8	0.7	0.0	25.4	30.9
	2015	670	27.5	22.7	40.8	27.5	8.1	0.9	0.0	25.4	30.0
Qatar	2011	596	24.5	27.5	35.2	24.5	9.0	3.2	0.6	26.3	23.0
	2015	740	33.3	24.3	29.7	33.3	10.4	1.8	0.5	31.9	34.8
Russian Federation	2011	644	65.4	11.4	16.5	65.4	5.3	1.4	0.0	64.0	66.7
	2015	710	69.5	8.7	16.9	69.5	4.0	0.9	0.0	71.5	67.7
Saudi Arabia	2011	658	27.2	31.6	29.4	27.2	11.3	0.4	0.0	28.7	25.6
	2015	596	21.2	29.0	36.9	21.2	9.3	2.4	1.1	20.6	21.8
Serbia	2011	624	44.5	18.9	28.2	44.5	6.5	1.9	0.1	39.2	48.8
	2015	566	46.4	20.9	23.7	46.4	6.9	1.9	0.2	40.5	51.5
Singapore	2011	915	95.4	0.4	3.2	95.4	0.9	0.1	0.0	96.4	94.4
	2015	931	96.7	1.2	0.9	96.7	1.1	0.2	0.0	96.4	96.9
Slovak Republic	2011	809	56.7	14.2	19.5	56.7	8.1	1.4	0.1	53.5	59.9
	2015	838	56.8	13.9	21.4	56.8	7.0	0.8	0.0	58.0	55.8
Slovenia	2011	640	52.0	19.4	18.1	52.0	8.5	1.9	0.1	52.8	51.2
	2015	635	49.9	17.5	22.2	49.9	9.5	0.8	0.1	46.6	53.4
Spain	2011	613	34.7	24.4	25.8	34.7	12.5	2.3	0.2	29.3	39.6
	2015	1101	37.7	19.8	29.9	37.7	10.6	1.9	0.0	35.4	40.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_01 (S051185): Life Science / Knowing Type: MC Key: C
Label: Water in tray and mosquitoes

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	57.9	11.3	26.7	57.9	2.2	1.9	0.1	60.0	55.7
	2015	586	53.2	13.4	24.3	53.2	3.5	5.6	0.1	57.5	48.5
Turkey	2011	1067	21.9	27.9	38.4	21.9	11.0	0.8	0.0	23.1	20.8
	2015	918	34.0	25.2	29.7	34.0	9.9	1.1	0.1	34.4	33.6
United Arab Emirates	2011	2087	31.3	28.2	26.9	31.3	10.5	2.8	0.4	31.0	31.6
	2015	3031	38.1	22.3	25.0	38.1	11.3	3.0	0.2	36.8	39.4
United States	2011	1762	54.3	19.1	18.1	54.3	7.3	1.1	0.2	54.2	54.3
	2015	1425	52.4	19.8	19.1	52.4	7.5	1.0	0.2	50.9	54.0

International Avg (n=40)	2011	30276	50.4	17.7	22.4	50.4	7.7	1.6	0.2	49.5	51.2
	2015	30603	51.3	17.5	21.4	51.3	7.8	1.7	0.3	50.8	51.8

Ontario, Canada	2011	648	53.5	15.6	19.8	53.5	9.0	1.9	0.2	50.5	56.2
	2015	657	52.9	19.8	19.3	52.9	6.7	1.2	0.1	53.9	51.8
Quebec, Canada	2011	616	47.9	16.0	28.6	47.9	6.5	1.0	0.0	47.9	48.0
	2015	398	49.5	18.3	24.2	49.5	7.3	0.7	0.0	42.4	56.1
Norway (4)	2011	436	55.2	16.6	23.8	55.2	3.8	0.4	0.3	53.5	57.0
	2015	599	58.2	11.6	23.3	58.2	5.8	0.6	0.4	56.6	59.7
Abu Dhabi, UAE	2011	592	24.8	31.5	28.4	24.8	11.9	2.9	0.5	25.8	24.0
	2015	716	30.6	25.4	28.4	30.6	12.4	2.9	0.3	29.3	31.6
Dubai, UAE	2011	865	43.2	19.9	23.5	43.2	11.3	1.6	0.6	38.8	46.8
	2015	1068	51.7	17.2	19.6	51.7	10.0	1.5	0.0	52.7	50.8
Florida, US	2011	376	52.5	16.5	21.6	52.5	7.5	2.0	0.0	51.8	53.1
	2015	289	57.5	20.7	14.3	57.5	6.5	1.0	0.0	56.9	58.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S06_02 (S051048): Life Science / Knowing Type: CR 2 Points
Label: Ways pollen is spread

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	36.6	40.2	15.4	7.0	0.7	76.8	36.6	36.1	37.1
	2015	869	35.2	41.9	15.4	7.0	0.5	77.1	35.2	37.3	33.2
Bahrain	2011	574	28.0	17.0	35.3	19.1	0.6	45.0	28.0	29.8	26.3
	2015	586	17.5	29.1	36.4	16.5	0.4	46.7	17.5	18.5	16.6
Belgium (Flemish)	2011	683	33.3	27.7	28.9	10.1	0.0	61.0	33.3	33.8	32.8
	2015	761	34.3	35.0	19.9	10.8	0.0	69.4	34.3	35.1	33.5
Chile	2011	794	26.3	28.2	23.3	21.1	1.1	54.5	26.3	24.9	28.0
	2015	680	26.2	39.4	17.0	15.9	1.5	65.6	26.2	25.0	27.4
Chinese Taipei	2011	603	32.9	35.3	14.4	17.4	0.0	68.2	32.9	34.7	31.4
	2015	617	27.6	48.0	9.5	14.9	0.0	75.6	27.6	24.7	30.3
Croatia	2011	649	33.2	29.8	11.5	25.6	0.0	63.0	33.2	34.8	31.6
	2015	560	38.7	36.8	9.6	14.7	0.1	75.6	38.7	40.8	36.6
Czech Republic	2011	647	48.4	34.5	4.5	12.4	0.2	82.9	48.4	46.2	50.3
	2015	742	48.7	36.5	5.0	9.7	0.0	85.2	48.7	49.8	47.4
Denmark	2011	576	27.5	29.0	25.1	17.7	0.7	56.5	27.5	24.4	30.9
	2015	525	25.9	37.4	20.3	15.1	1.3	63.4	25.9	19.6	31.6
England	2011	494	42.4	38.3	12.5	6.3	0.4	80.7	42.4	41.8	43.0
	2015	577	31.4	46.4	16.6	5.3	0.2	77.8	31.4	31.0	31.9
Finland	2011	659	52.3	33.7	5.9	8.0	0.1	86.0	52.3	56.3	48.9
	2015	723	58.3	30.5	5.8	5.1	0.3	88.8	58.3	64.4	52.8
Georgia	2011	678	27.4	22.6	20.2	28.6	1.2	50.0	27.4	30.1	25.1
	2015	556	38.4	27.4	14.7	19.4	0.1	65.8	38.4	36.0	40.8
Germany	2011	567	29.3	26.8	16.7	27.2	0.0	56.1	29.3	33.5	25.4
	2015	563	25.1	33.8	17.3	23.9	0.0	58.9	25.1	25.4	24.8
Hong Kong SAR	2011	557	32.6	32.1	19.9	15.3	0.0	64.8	32.6	31.9	33.2
	2015	516	31.8	39.8	20.3	8.1	0.0	71.6	31.8	29.7	33.7
Hungary	2011	745	60.8	19.2	7.8	11.7	0.5	80.0	60.8	60.0	61.6
	2015	717	61.0	22.7	8.2	8.0	0.1	83.7	61.0	63.1	59.0
Iran, Islamic Rep. of	2011	825	7.9	10.8	39.8	41.2	0.4	18.7	7.9	8.5	7.3
	2015	541	7.7	11.2	31.8	45.3	4.1	18.9	7.7	8.5	6.7
Ireland	2011	647	31.9	39.6	15.8	12.6	0.1	71.5	31.9	34.1	29.8
	2015	622	32.3	44.5	16.6	6.4	0.2	76.8	32.3	30.8	33.6
Italy	2011	597	43.2	27.1	11.5	18.2	0.0	70.3	43.2	44.2	42.1
	2015	606	53.0	21.9	10.4	14.6	0.1	74.9	53.0	54.0	52.1
Japan	2011	627	25.7	30.2	32.5	11.4	0.1	55.9	25.7	27.6	23.8
	2015	622	31.1	31.5	23.1	14.0	0.3	62.6	31.1	30.9	31.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_02 (S051048): Life Science / Knowing Type: CR 2 Points
Label: Ways pollen is spread

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	30.4	21.4	27.2	20.9	0.1	51.8	30.4	26.6	33.9
	2015	664	35.6	30.3	24.8	9.1	0.2	65.9	35.6	34.3	36.7
Korea, Rep. of	2011	619	42.0	42.6	10.4	5.1	0.0	84.6	42.0	40.5	43.4
	2015	673	43.7	36.4	16.8	3.1	0.0	80.1	43.7	43.5	44.0
Kuwait	2011	587	27.7	17.7	24.1	30.0	0.5	45.4	27.7	31.3	23.6
	2015	503	13.2	14.8	30.3	40.2	1.6	27.9	13.2	12.9	13.4
Lithuania	2011	670	42.2	27.1	16.5	14.2	0.0	69.3	42.2	43.5	40.9
	2015	638	43.8	25.2	13.0	18.0	0.0	69.0	43.8	43.2	44.4
Morocco	2011	1122	6.7	8.1	43.3	40.6	1.3	14.8	6.7	7.0	6.4
	2015	721	17.9	14.0	41.4	25.8	0.9	31.9	17.9	15.2	20.3
Netherlands	2011	461	44.6	29.8	22.0	3.3	0.2	74.4	44.6	41.3	48.3
	2015	635	34.5	32.5	23.5	9.1	0.3	67.0	34.5	32.9	36.1
New Zealand	2011	814	31.6	40.7	18.5	8.8	0.4	72.3	31.6	33.4	29.8
	2015	896	37.3	38.0	18.6	6.0	0.1	75.2	37.3	37.0	37.6
Northern Ireland	2011	503	39.2	33.4	14.0	13.4	0.0	72.6	39.2	43.4	35.4
	2015	445	30.6	38.3	22.1	9.0	0.0	68.9	30.6	31.7	29.6
Oman	2011	1487	13.8	20.6	40.3	24.5	0.8	34.5	13.8	16.8	11.3
	2015	1307	20.0	22.0	40.6	17.0	0.4	42.0	20.0	21.6	18.4
Portugal	2011	580	42.0	30.1	12.7	15.2	0.0	72.1	42.0	40.4	43.5
	2015	670	34.2	38.1	14.7	13.0	0.0	72.3	34.2	32.7	35.9
Qatar	2011	596	19.5	22.3	33.2	24.4	0.6	41.7	19.5	19.8	19.2
	2015	740	22.8	27.3	29.6	19.7	0.6	50.1	22.8	22.8	22.9
Russian Federation	2011	644	45.9	32.7	9.4	12.0	0.0	78.5	45.9	49.9	42.0
	2015	710	52.9	31.5	9.8	5.6	0.2	84.4	52.9	51.4	54.2
Saudi Arabia	2011	658	37.8	11.6	34.2	16.4	0.0	49.4	37.8	40.0	35.4
	2015	602	20.1	21.3	29.9	27.3	1.3	41.5	20.1	27.7	13.3
Serbia	2011	624	32.2	22.0	13.0	32.7	0.2	54.2	32.2	32.7	31.7
	2015	566	39.2	26.5	11.2	22.9	0.2	65.6	39.2	34.0	43.6
Singapore	2011	915	26.8	33.8	35.0	4.5	0.0	60.6	26.8	23.1	30.2
	2015	931	27.4	39.7	27.6	5.3	0.0	67.1	27.4	29.1	25.8
Slovak Republic	2011	809	37.0	42.8	7.6	12.4	0.1	79.9	37.0	39.3	34.8
	2015	838	40.5	32.1	9.8	17.6	0.0	72.6	40.5	40.9	40.1
Slovenia	2011	644	47.3	26.4	9.9	16.3	0.1	73.7	47.3	56.1	39.0
	2015	635	55.0	28.8	6.1	9.9	0.3	83.8	55.0	58.4	51.5
Spain	2011	613	36.0	27.1	16.0	20.2	0.8	63.1	36.0	33.8	37.9
	2015	1101	44.7	30.1	11.9	13.3	0.0	74.9	44.7	42.6	46.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_02 (S051048): Life Science / Knowing Type: CR 2 Points
Label: Ways pollen is spread

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	41.1	32.1	11.1	15.7	0.1	73.2	41.1	42.4	39.7
	2015	587	40.0	36.5	14.1	9.2	0.1	76.5	40.0	45.6	34.8
Turkey	2011	1067	15.0	22.5	44.3	18.2	0.0	37.5	15.0	15.7	14.4
	2015	918	23.2	31.8	30.8	14.1	0.1	55.0	23.2	22.9	23.4
United Arab Emirates	2011	2087	16.5	19.9	39.9	23.0	0.7	36.4	16.5	18.8	14.4
	2015	3031	22.8	24.8	32.9	19.0	0.5	47.6	22.8	26.4	19.6
United States	2011	1762	46.1	38.4	11.9	3.3	0.2	84.5	46.1	47.5	44.6
	2015	1425	44.1	41.4	11.9	2.3	0.4	85.4	44.1	46.4	41.6

International Avg (n=40)	2011	30376	33.5	28.1	20.9	17.1	0.3	61.7	33.5	34.4	32.7
	2015	30619	34.2	31.9	19.2	14.3	0.4	66.1	34.2	34.4	33.9

Ontario, Canada	2011	648	42.5	36.2	13.0	7.9	0.5	78.7	42.5	41.6	43.3
	2015	658	37.2	42.2	15.4	4.7	0.5	79.4	37.2	37.2	37.3
Quebec, Canada	2011	616	34.9	36.5	17.6	11.0	0.0	71.4	34.9	39.6	29.9
	2015	398	36.6	43.3	12.0	8.0	0.1	79.9	36.6	35.4	37.7
Norway (4)	2011	436	23.1	32.6	24.9	19.0	0.4	55.7	23.1	24.5	21.5
	2015	599	32.7	33.2	17.6	16.0	0.4	65.9	32.7	33.8	31.6
Abu Dhabi, UAE	2011	592	11.2	18.2	49.3	20.5	0.7	29.4	11.2	14.1	8.5
	2015	716	14.8	25.2	37.9	21.4	0.7	40.0	14.8	15.0	14.6
Dubai, UAE	2011	865	25.6	24.0	28.4	21.2	0.8	49.6	25.6	25.1	26.0
	2015	1068	37.3	29.7	22.3	10.7	0.0	66.9	37.3	42.5	32.1
Florida, US	2011	376	40.6	42.3	13.5	3.6	0.0	82.9	40.6	43.4	37.8
	2015	289	38.9	46.1	12.3	2.4	0.3	85.0	38.9	38.3	39.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_03 (S051164): Life Science / Applying Type: CR 1 Point
Label: Why frogs lay more eggs than birds

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	10.5	82.4	6.3	0.8	10.5	11.3	9.8
	2015	869	20.9	73.6	4.9	0.6	20.9	22.7	19.1
Bahrain	2011	574	16.8	65.8	16.8	0.6	16.8	19.0	14.7
	2015	584	21.0	63.6	14.2	1.2	21.0	26.3	15.5
Belgium (Flemish)	2011	683	9.4	81.9	8.7	0.0	9.4	9.4	9.4
	2015	761	5.9	83.3	10.8	0.0	5.9	6.7	5.1
Chile	2011	794	8.4	77.7	12.5	1.3	8.4	8.0	8.9
	2015	681	8.1	71.0	19.2	1.7	8.1	6.5	9.9
Chinese Taipei	2011	603	12.2	69.3	18.5	0.0	12.2	10.5	13.7
	2015	617	11.9	73.7	14.3	0.0	11.9	11.8	12.1
Croatia	2011	649	4.2	62.6	33.2	0.0	4.2	4.4	4.0
	2015	560	9.3	72.8	17.8	0.1	9.3	6.9	11.7
Czech Republic	2011	647	14.1	61.0	24.8	0.2	14.1	14.4	13.8
	2015	742	8.7	65.7	25.6	0.0	8.7	8.4	9.1
Denmark	2011	576	16.8	67.9	14.4	0.9	16.8	16.2	17.5
	2015	525	9.9	79.3	8.9	2.0	9.9	9.8	9.9
England	2011	494	18.6	73.6	7.3	0.4	18.6	18.4	18.9
	2015	577	5.3	86.5	8.0	0.2	5.3	5.0	5.7
Finland	2011	659	22.4	62.1	15.4	0.1	22.4	27.3	18.3
	2015	723	20.2	67.3	12.1	0.3	20.2	22.8	17.9
Georgia	2011	678	16.7	54.2	26.5	2.6	16.7	18.6	15.1
	2015	556	18.6	63.4	17.8	0.2	18.6	19.0	18.2
Germany	2011	567	12.9	63.8	23.3	0.0	12.9	12.5	13.3
	2015	563	20.5	56.1	23.4	0.0	20.5	20.4	20.7
Hong Kong SAR	2011	557	11.9	68.5	19.6	0.0	11.9	10.7	12.9
	2015	516	18.6	71.3	10.0	0.0	18.6	16.4	20.7
Hungary	2011	745	7.2	76.6	14.8	1.3	7.2	8.9	5.6
	2015	717	9.4	75.9	14.5	0.1	9.4	10.8	8.1
Iran, Islamic Rep. of	2011	825	6.6	71.0	21.4	1.0	6.6	6.1	7.1
	2015	541	3.3	60.8	31.5	4.5	3.3	3.7	2.9
Ireland	2011	647	10.7	78.6	10.5	0.1	10.7	12.7	8.8
	2015	622	11.2	83.5	5.1	0.2	11.2	12.1	10.3
Italy	2011	597	13.4	65.6	20.7	0.3	13.4	14.3	12.3
	2015	608	18.1	62.3	19.1	0.4	18.1	18.8	17.5
Japan	2011	627	21.8	71.8	6.1	0.3	21.8	21.2	22.4
	2015	622	21.4	71.7	6.6	0.3	21.4	22.9	20.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_03 (S051164): Life Science / Applying Type: CR 1 Point
Label: Why frogs lay more eggs than birds

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	10.8	69.4	19.7	0.1	10.8	10.7	10.8
	2015	664	26.4	64.5	8.8	0.3	26.4	26.2	26.5
Korea, Rep. of	2011	619	35.3	57.8	6.9	0.0	35.3	36.9	33.9
	2015	673	43.9	52.9	3.2	0.0	43.9	40.7	47.0
Kuwait	2011	587	2.1	58.1	38.9	1.0	2.1	3.0	1.0
	2015	504	3.9	44.3	49.5	2.2	3.9	4.4	3.5
Lithuania	2011	670	5.8	76.9	17.2	0.0	5.8	6.6	5.2
	2015	638	8.1	74.0	18.0	0.0	8.1	7.7	8.5
Morocco	2011	1122	0.8	56.8	40.6	1.8	0.8	0.7	0.9
	2015	723	8.4	65.1	25.4	1.1	8.4	11.2	5.8
Netherlands	2011	461	17.8	79.4	2.3	0.4	17.8	18.1	17.6
	2015	640	23.4	69.3	6.8	0.5	23.4	21.2	25.6
New Zealand	2011	814	4.6	88.8	6.2	0.5	4.6	3.9	5.2
	2015	896	11.6	82.3	5.9	0.2	11.6	12.2	11.1
Northern Ireland	2011	503	10.9	78.8	10.3	0.0	10.9	12.0	9.9
	2015	445	8.6	84.2	7.2	0.0	8.6	7.2	10.0
Oman	2011	1487	6.2	67.2	25.8	0.8	6.2	6.7	5.8
	2015	1304	10.6	74.8	14.2	0.4	10.6	11.5	9.8
Portugal	2011	579	5.3	77.7	17.0	0.0	5.3	5.5	5.2
	2015	670	5.9	80.9	13.1	0.0	5.9	4.5	7.6
Qatar	2011	596	5.6	69.1	24.5	0.8	5.6	6.6	4.7
	2015	740	14.5	65.8	18.7	1.0	14.5	16.5	12.4
Russian Federation	2011	644	15.5	67.3	17.0	0.3	15.5	18.5	12.5
	2015	710	31.6	58.2	10.0	0.2	31.6	33.8	29.6
Saudi Arabia	2011	658	1.8	80.0	17.9	0.3	1.8	2.5	1.0
	2015	602	3.0	62.5	33.0	1.5	3.0	4.5	1.7
Serbia	2011	624	6.4	69.9	23.4	0.3	6.4	5.4	7.2
	2015	566	17.3	55.7	26.7	0.3	17.3	13.7	20.4
Singapore	2011	915	40.0	58.5	1.5	0.0	40.0	37.9	41.9
	2015	931	44.0	53.9	2.1	0.0	44.0	46.5	41.7
Slovak Republic	2011	809	7.5	68.5	23.9	0.1	7.5	7.7	7.4
	2015	838	6.2	69.6	23.9	0.2	6.2	5.6	6.8
Slovenia	2011	644	3.1	76.0	20.7	0.1	3.1	4.1	2.2
	2015	635	9.2	71.1	19.4	0.3	9.2	7.2	11.3
Spain	2011	613	8.6	66.4	24.3	0.8	8.6	7.6	9.4
	2015	1101	12.4	71.1	16.2	0.4	12.4	10.8	13.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_03 (S051164): Life Science / Applying Type: CR 1 Point
Label: Why frogs lay more eggs than birds

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	24.8	60.1	14.8	0.2	24.8	28.3	21.2
	2015	586	22.9	63.2	13.4	0.5	22.9	24.3	20.9
Turkey	2011	1067	3.4	82.0	14.5	0.1	3.4	3.1	3.6
	2015	918	4.9	79.8	15.2	0.1	4.9	5.0	4.8
United Arab Emirates	2011	2087	6.1	68.8	24.2	0.9	6.1	5.3	6.8
	2015	3031	10.8	69.3	19.3	0.6	10.8	11.2	10.5
United States	2011	1762	22.3	75.0	2.5	0.2	22.3	22.4	22.3
	2015	1425	23.0	73.8	2.8	0.4	23.0	22.5	23.5

International Avg (n=40)	2011	30376	12.0	70.2	17.4	0.5	12.0	12.4	11.6
	2015	30624	14.8	69.2	15.4	0.5	14.8	15.0	14.7

Ontario, Canada	2011	648	11.3	81.2	7.0	0.5	11.3	10.8	11.7
	2015	658	17.1	75.9	6.5	0.5	17.1	16.9	17.3
Quebec, Canada	2011	616	10.6	78.6	10.7	0.1	10.6	8.5	12.9
	2015	398	17.0	73.6	9.3	0.1	17.0	19.0	15.2
Norway (4)	2011	436	7.7	75.9	15.8	0.5	7.7	6.5	9.0
	2015	599	9.3	71.7	18.4	0.6	9.3	8.1	10.5
Abu Dhabi, UAE	2011	592	4.4	70.2	24.5	0.9	4.4	4.8	4.1
	2015	716	6.8	72.4	20.0	0.8	6.8	6.4	7.1
Dubai, UAE	2011	865	8.7	69.7	20.7	1.0	8.7	5.5	11.3
	2015	1068	19.7	68.9	11.2	0.2	19.7	20.2	19.2
Florida, US	2011	376	19.9	75.7	4.1	0.3	19.9	22.1	17.7
	2015	289	21.9	74.3	3.5	0.3	21.9	25.0	18.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_04 (S051186): Life Science / Applying Type: CR 1 Point
Label: Write in names in food chain

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	67.6	29.0	2.6	0.9	67.6	63.5	71.1
	2015	869	75.1	21.6	2.4	0.9	75.1	75.6	74.7
Bahrain	2011	574	70.2	25.8	3.4	0.6	70.2	71.5	68.9
	2015	584	79.6	17.3	1.9	1.3	79.6	81.1	78.0
Belgium (Flemish)	2011	683	66.2	31.6	1.9	0.3	66.2	60.0	72.2
	2015	761	75.6	22.8	1.6	0.0	75.6	73.2	78.0
Chile	2011	794	58.0	35.7	4.9	1.5	58.0	52.8	63.7
	2015	681	66.2	25.7	5.4	2.6	66.2	64.5	68.0
Chinese Taipei	2011	603	78.1	19.8	2.2	0.0	78.1	74.3	81.3
	2015	617	73.6	23.0	3.4	0.0	73.6	68.5	78.4
Croatia	2011	649	64.2	32.2	3.6	0.0	64.2	65.5	63.0
	2015	560	70.3	27.3	2.3	0.2	70.3	69.7	70.9
Czech Republic	2011	647	72.5	22.4	4.9	0.2	72.5	71.4	73.4
	2015	742	77.3	18.4	4.2	0.1	77.3	75.8	79.0
Denmark	2011	577	71.8	22.0	4.6	1.6	71.8	68.1	76.0
	2015	525	74.9	18.3	4.3	2.5	74.9	71.8	77.7
England	2011	494	76.1	22.2	1.3	0.4	76.1	75.4	76.7
	2015	577	76.0	22.1	1.7	0.2	76.0	76.0	76.0
Finland	2011	659	87.3	10.7	1.9	0.1	87.3	86.8	87.7
	2015	723	78.6	17.1	4.0	0.3	78.6	84.4	73.3
Georgia	2011	668	30.7	54.7	12.0	2.7	30.7	31.7	29.8
	2015	556	48.9	40.0	11.0	0.2	48.9	47.4	50.3
Germany	2011	567	70.9	24.4	4.6	0.1	70.9	68.1	73.4
	2015	563	73.1	20.6	5.9	0.3	73.1	70.0	75.9
Hong Kong SAR	2011	557	83.6	14.1	2.2	0.0	83.6	81.2	85.6
	2015	516	86.0	12.2	1.8	0.0	86.0	84.8	87.1
Hungary	2011	745	81.9	14.2	2.4	1.4	81.9	81.8	82.1
	2015	717	88.4	10.3	1.0	0.3	88.4	87.1	89.5
Iran, Islamic Rep. of	2011	825	38.8	50.8	9.3	1.0	38.8	38.6	39.1
	2015	541	35.0	48.3	11.6	5.1	35.0	33.3	37.0
Ireland	2011	647	61.3	36.0	2.6	0.1	61.3	59.3	63.2
	2015	622	67.4	31.6	0.9	0.2	67.4	67.2	67.5
Italy	2011	597	73.5	23.0	2.9	0.6	73.5	73.8	73.3
	2015	606	78.8	18.0	2.8	0.4	78.8	77.8	79.8
Japan	2011	627	90.2	9.1	0.4	0.4	90.2	87.5	92.8
	2015	622	86.4	12.3	1.0	0.3	86.4	84.8	87.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_04 (S051186): Life Science / Applying Type: CR 1 Point
Label: Write in names in food chain

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	55.0	35.5	9.2	0.2	55.0	56.1	54.0
	2015	664	63.8	30.9	4.9	0.3	63.8	62.3	65.2
Korea, Rep. of	2011	619	91.0	8.2	0.7	0.0	91.0	89.9	92.1
	2015	673	91.5	8.0	0.5	0.0	91.5	87.1	95.6
Kuwait	2011	585	58.4	34.7	5.5	1.5	58.4	64.7	50.7
	2015	504	51.3	36.8	9.3	2.6	51.3	54.8	47.6
Lithuania	2011	670	79.0	18.5	2.6	0.0	79.0	79.5	78.5
	2015	638	82.3	15.4	2.3	0.0	82.3	83.8	80.8
Morocco	2011	1120	32.0	49.4	16.3	2.3	32.0	29.0	35.0
	2015	725	49.1	44.4	5.4	1.2	49.1	44.8	52.9
Netherlands	2011	461	79.8	17.8	2.0	0.4	79.8	77.6	82.0
	2015	640	73.8	22.4	3.2	0.6	73.8	74.0	73.5
New Zealand	2011	814	57.5	39.0	3.0	0.6	57.5	58.6	56.4
	2015	896	64.8	31.4	3.4	0.5	64.8	59.5	69.6
Northern Ireland	2011	503	70.0	28.2	1.5	0.2	70.0	65.6	74.0
	2015	445	63.0	35.2	1.8	0.0	63.0	65.8	60.3
Oman	2011	1487	74.3	23.4	1.3	1.0	74.3	74.8	73.8
	2015	1306	73.1	23.3	3.1	0.6	73.1	75.9	70.3
Portugal	2011	580	72.9	25.5	1.6	0.0	72.9	71.1	74.7
	2015	670	82.5	16.7	0.7	0.0	82.5	79.8	85.8
Qatar	2011	596	58.9	36.9	3.1	1.0	58.9	63.4	55.2
	2015	740	57.7	37.0	4.1	1.2	57.7	60.5	54.6
Russian Federation	2011	644	78.7	19.3	1.5	0.4	78.7	81.3	76.3
	2015	710	89.1	9.4	1.3	0.2	89.1	88.5	89.6
Saudi Arabia	2011	658	61.4	31.4	6.9	0.3	61.4	68.5	54.0
	2015	600	51.4	40.6	6.5	1.5	51.4	63.9	40.0
Serbia	2011	624	77.8	19.9	2.0	0.3	77.8	77.8	77.8
	2015	566	78.8	17.4	3.5	0.3	78.8	77.2	80.2
Singapore	2011	915	76.2	23.2	0.4	0.1	76.2	72.0	80.1
	2015	931	78.2	20.9	0.8	0.0	78.2	76.4	80.0
Slovak Republic	2011	809	69.4	28.0	2.4	0.1	69.4	69.6	69.3
	2015	838	68.0	28.1	3.6	0.3	68.0	63.8	72.0
Slovenia	2011	644	75.1	20.2	4.6	0.1	75.1	75.3	74.9
	2015	635	82.4	15.7	1.6	0.3	82.4	84.9	79.8
Spain	2011	613	71.8	23.5	3.9	0.8	71.8	70.6	72.8
	2015	1101	74.7	22.0	2.9	0.4	74.7	73.8	75.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_04 (S051186): Life Science / Applying Type: CR 1 Point
Label: Write in names in food chain

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	65.7	28.5	5.2	0.6	65.7	64.2	67.2
	2015	587	82.5	13.5	3.3	0.7	82.5	85.5	79.5
Turkey	2011	1067	50.4	47.4	2.1	0.1	50.4	48.6	52.2
	2015	918	54.0	42.0	3.8	0.2	54.0	51.5	56.6
United Arab Emirates	2011	2087	59.1	36.4	3.5	1.1	59.1	58.6	59.5
	2015	3031	65.9	30.0	3.5	0.7	65.9	65.2	66.5
United States	2011	1762	78.4	19.8	1.4	0.4	78.4	77.0	79.9
	2015	1425	79.2	18.1	2.3	0.5	79.2	77.7	80.7

International Avg (n=40)	2011	30364	68.4	27.3	3.7	0.6	68.4	67.6	69.1
	2015	30625	71.7	24.2	3.5	0.7	71.7	71.2	72.1

Ontario, Canada	2011	648	77.9	19.0	2.2	0.9	77.9	76.1	79.6
	2015	658	81.5	15.2	2.3	1.0	81.5	80.4	82.5
Quebec, Canada	2011	616	69.6	27.4	2.9	0.1	69.6	69.5	69.6
	2015	398	76.2	21.6	1.4	0.8	76.2	72.4	79.7
Norway (4)	2011	436	59.6	34.8	4.8	0.8	59.6	57.6	61.8
	2015	599	64.1	31.9	3.0	1.1	64.1	65.4	62.7
Abu Dhabi, UAE	2011	592	54.8	40.5	3.6	1.0	54.8	53.5	56.1
	2015	716	58.7	36.3	4.1	0.9	58.7	56.0	60.9
Dubai, UAE	2011	865	71.4	24.9	2.5	1.2	71.4	71.0	71.8
	2015	1068	81.6	16.4	1.7	0.3	81.6	83.4	79.8
Florida, US	2011	376	79.7	17.2	2.0	1.0	79.7	79.9	79.6
	2015	289	83.4	15.7	0.6	0.3	83.4	82.5	84.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_05 (S051137): Life Science / Applying Type: MC Key: D
Label: Why wash hands before eating

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	65.6	7.3	7.4	15.0	65.6	3.5	1.2	72.5	59.6
	2015	869	70.4	6.9	4.6	14.1	70.4	3.1	1.0	73.8	67.2
Bahrain	2011	574	66.7	8.5	10.6	12.1	66.7	1.5	0.6	73.7	59.9
	2015	584	65.7	8.0	8.2	15.2	65.7	1.7	1.3	77.2	53.9
Belgium (Flemish)	2011	683	67.7	13.4	7.2	10.0	67.7	1.2	0.4	72.6	63.0
	2015	761	66.6	13.1	5.2	13.5	66.6	1.3	0.2	65.9	67.4
Chile	2011	794	85.4	2.2	5.9	3.1	85.4	1.5	1.9	87.4	83.2
	2015	681	82.8	3.9	4.7	3.8	82.8	1.7	3.2	82.6	83.0
Chinese Taipei	2011	603	88.6	6.0	1.6	3.3	88.6	0.5	0.0	91.0	86.6
	2015	617	88.6	7.0	0.9	2.6	88.6	0.9	0.0	88.6	88.7
Croatia	2011	649	82.3	3.6	5.9	6.2	82.3	2.0	0.0	84.3	80.4
	2015	560	85.5	4.3	3.8	4.7	85.5	1.6	0.2	86.6	84.4
Czech Republic	2011	647	86.8	5.2	4.7	2.4	86.8	0.7	0.2	88.5	85.3
	2015	742	86.2	8.5	2.4	2.3	86.2	0.5	0.1	89.2	82.7
Denmark	2011	577	91.1	1.1	1.2	2.6	91.1	2.1	1.9	92.4	89.6
	2015	525	89.9	0.6	1.4	3.7	89.9	0.9	3.6	88.4	91.3
England	2011	494	81.8	2.1	5.0	9.8	81.8	0.9	0.4	84.2	79.5
	2015	577	85.6	2.6	3.4	7.1	85.6	0.6	0.5	87.7	83.5
Finland	2011	659	86.5	6.0	3.2	2.6	86.5	1.7	0.1	88.2	85.0
	2015	723	87.0	4.0	4.1	2.7	87.0	1.2	0.9	89.9	84.3
Georgia	2011	668	59.8	27.6	3.5	4.9	59.8	1.5	2.7	59.7	59.9
	2015	556	73.5	15.6	4.1	5.4	73.5	1.0	0.3	74.2	72.9
Germany	2011	567	89.5	2.5	2.1	4.5	89.5	1.2	0.1	91.0	88.1
	2015	563	87.4	3.0	3.1	3.6	87.4	2.4	0.5	89.6	85.5
Hong Kong SAR	2011	557	93.5	2.7	1.9	1.2	93.5	0.6	0.2	95.8	91.5
	2015	516	94.9	0.5	1.5	2.0	94.9	0.2	0.9	95.2	94.7
Hungary	2011	745	82.0	4.1	1.7	9.3	82.0	1.3	1.7	82.8	81.2
	2015	717	83.5	5.7	3.6	5.2	83.5	1.6	0.4	82.7	84.4
Iran, Islamic Rep. of	2011	825	69.2	8.6	7.1	10.8	69.2	3.0	1.1	70.2	68.2
	2015	541	65.2	6.3	7.5	12.0	65.2	3.3	5.7	69.2	60.4
Ireland	2011	647	79.2	4.7	4.5	10.8	79.2	0.6	0.1	82.1	76.4
	2015	622	76.3	4.9	5.4	12.6	76.3	0.6	0.2	80.7	72.6
Italy	2011	597	69.7	4.3	16.6	6.9	69.7	1.6	0.9	65.5	74.5
	2015	608	71.5	6.5	14.7	5.8	71.5	1.0	0.6	75.1	68.3
Japan	2011	627	89.7	3.8	3.0	2.4	89.7	0.8	0.4	92.7	86.7
	2015	622	91.8	3.4	2.0	2.0	91.8	0.1	0.6	91.5	92.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_05 (S051137): Life Science / Applying Type: MC Key: D
Label: Why wash hands before eating

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	81.0	4.9	4.7	6.6	81.0	2.1	0.7	83.2	79.0
	2015	664	84.1	4.1	5.6	5.1	84.1	0.6	0.5	86.1	82.3
Korea, Rep. of	2011	619	90.5	1.5	4.8	3.0	90.5	0.2	0.0	93.7	87.5
	2015	673	94.4	1.0	3.2	1.2	94.4	0.1	0.1	96.0	92.9
Kuwait	2011	577	37.1	14.2	18.0	20.6	37.1	8.7	1.5	39.3	34.5
	2015	504	37.3	17.1	17.9	17.1	37.3	8.1	2.6	43.5	30.8
Lithuania	2011	670	81.4	4.5	4.1	9.1	81.4	0.9	0.0	88.5	75.2
	2015	638	85.9	3.0	2.4	8.1	85.9	0.6	0.0	87.8	84.0
Morocco	2011	1025	44.4	10.1	22.3	21.1	44.4	1.7	0.4	46.9	41.8
	2015	721	48.8	7.5	18.5	20.7	48.8	3.3	1.2	50.9	46.9
Netherlands	2011	461	79.6	6.7	3.9	8.6	79.6	0.7	0.7	82.2	76.6
	2015	640	81.6	6.7	3.8	5.1	81.6	1.3	1.4	82.0	81.3
New Zealand	2011	814	72.9	7.6	5.2	10.5	72.9	3.1	0.7	77.7	68.3
	2015	896	75.0	5.4	3.8	13.1	75.0	2.0	0.7	79.4	71.0
Northern Ireland	2011	503	76.6	3.5	3.6	14.4	76.6	1.7	0.2	81.5	72.3
	2015	440	79.3	3.7	4.5	11.9	79.3	0.6	0.0	83.0	75.6
Oman	2011	1487	51.1	12.6	14.1	18.1	51.1	3.0	1.2	55.5	47.3
	2015	1306	59.0	11.0	12.4	15.3	59.0	1.8	0.6	65.1	52.9
Portugal	2011	580	78.6	6.5	6.1	6.9	78.6	1.2	0.6	84.6	72.7
	2015	670	75.8	8.9	4.5	8.8	75.8	1.9	0.1	79.6	71.4
Qatar	2011	596	56.6	10.8	13.1	16.4	56.6	2.0	1.2	61.8	52.2
	2015	740	64.0	8.9	8.7	14.8	64.0	2.1	1.5	71.5	55.9
Russian Federation	2011	644	88.9	3.3	3.0	2.8	88.9	1.4	0.5	88.7	89.0
	2015	710	91.7	1.3	3.3	2.4	91.7	1.2	0.2	92.2	91.3
Saudi Arabia	2011	656	61.5	7.2	13.3	15.3	61.5	2.3	0.3	70.2	52.5
	2015	598	57.2	10.4	12.5	15.2	57.2	3.1	1.5	68.1	47.3
Serbia	2011	624	83.7	3.7	6.4	5.1	83.7	0.7	0.3	83.3	84.1
	2015	566	84.4	5.5	2.3	5.7	84.4	1.8	0.3	88.0	81.3
Singapore	2011	915	89.0	2.5	3.2	5.1	89.0	0.1	0.1	91.5	86.7
	2015	931	89.1	2.6	2.3	5.4	89.1	0.5	0.0	90.8	87.6
Slovak Republic	2011	809	83.7	5.8	3.8	5.4	83.7	1.2	0.1	86.2	81.3
	2015	838	78.0	6.3	5.9	7.9	78.0	1.6	0.3	78.7	77.3
Slovenia	2011	642	75.8	5.8	3.4	10.8	75.8	4.0	0.1	76.8	74.9
	2015	635	78.4	4.3	3.8	10.0	78.4	3.1	0.4	81.1	75.5
Spain	2011	613	78.1	4.1	7.7	6.6	78.1	2.4	1.2	76.6	79.4
	2015	1101	84.1	2.6	6.6	5.1	84.1	1.3	0.4	83.5	84.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_05 (S051137): Life Science / Applying Type: MC Key: D
Label: Why wash hands before eating

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	73.1	10.3	8.2	6.5	73.1	1.3	0.7	74.1	72.0
	2015	587	76.0	8.3	6.4	4.8	76.0	3.5	0.9	76.1	75.9
Turkey	2011	1067	70.5	6.7	14.7	7.5	70.5	0.4	0.2	74.5	66.6
	2015	918	68.4	6.2	14.1	10.2	68.4	1.0	0.2	67.1	69.7
United Arab Emirates	2011	2087	60.1	9.7	9.4	17.6	60.1	2.0	1.2	61.4	58.8
	2015	3030	63.8	9.8	9.6	13.6	63.8	2.5	0.7	68.1	59.9
United States	2011	1762	60.9	13.4	7.4	16.6	60.9	1.2	0.6	63.6	57.9
	2015	1425	62.9	12.0	6.9	15.5	62.9	1.7	1.1	64.1	61.7

International Avg (n=40)	2011	30257	75.3	6.7	6.8	8.8	75.3	1.7	0.7	77.9	72.7
	2015	30615	76.8	6.3	6.0	8.4	76.8	1.7	0.9	79.3	74.4

Ontario, Canada	2011	648	62.7	9.0	8.1	17.3	62.7	1.6	1.4	62.9	62.6
	2015	656	70.1	6.8	5.3	15.4	70.1	1.0	1.4	75.9	65.1
Quebec, Canada	2011	616	60.4	15.4	10.7	10.3	60.4	3.1	0.1	66.1	54.5
	2015	398	57.4	17.9	13.5	9.9	57.4	0.5	0.8	54.7	59.9
Norway (4)	2011	436	79.1	6.3	4.4	6.8	79.1	2.5	0.8	75.4	83.3
	2015	599	82.2	6.2	3.0	5.1	82.2	2.2	1.3	83.7	80.6
Abu Dhabi, UAE	2011	592	53.2	11.8	9.3	22.2	53.2	2.3	1.2	55.7	50.9
	2015	716	53.1	12.3	13.4	17.2	53.1	3.1	0.9	55.8	51.0
Dubai, UAE	2011	865	70.5	5.1	7.9	13.7	70.5	1.6	1.3	71.9	69.3
	2015	1067	73.7	5.9	5.8	12.6	73.7	1.8	0.3	79.8	67.7
Florida, US	2011	376	60.8	8.9	9.4	19.4	60.8	0.5	1.0	62.6	59.0
	2015	289	61.9	11.1	5.6	19.7	61.9	1.4	0.3	62.7	60.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S06_06 (S051007): Life Science / Applying Type: CR 1 Point
Label: Importance of spiders

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	54.9	40.0	3.5	1.6	54.9	58.1	52.0
	2015	869	65.0	28.8	4.9	1.3	65.0	63.1	66.7
Bahrain	2011	574	28.0	56.9	14.3	0.8	28.0	28.0	28.0
	2015	586	35.9	50.4	12.4	1.3	35.9	41.1	30.7
Belgium (Flemish)	2011	683	62.6	33.7	3.3	0.4	62.6	62.6	62.6
	2015	761	65.2	30.1	4.5	0.2	65.2	63.6	66.9
Chile	2011	794	45.0	42.6	10.4	2.0	45.0	42.4	47.9
	2015	681	46.0	37.4	13.4	3.2	46.0	44.1	48.0
Chinese Taipei	2011	603	64.8	25.9	9.3	0.0	64.8	61.2	67.9
	2015	617	63.2	28.2	8.6	0.0	63.2	61.7	64.6
Croatia	2011	649	49.8	27.9	22.3	0.0	49.8	49.9	49.6
	2015	560	62.4	28.1	9.3	0.2	62.4	61.0	63.9
Czech Republic	2011	647	75.9	16.6	7.2	0.2	75.9	75.3	76.5
	2015	742	70.5	20.4	8.9	0.1	70.5	71.1	69.9
Denmark	2011	577	55.6	32.7	9.7	1.9	55.6	50.9	60.9
	2015	525	56.5	31.9	7.7	4.0	56.5	56.4	56.5
England	2011	494	52.8	41.7	5.0	0.4	52.8	54.8	50.9
	2015	577	45.4	49.4	4.7	0.5	45.4	47.1	43.6
Finland	2011	659	59.6	28.5	11.7	0.1	59.6	63.4	56.5
	2015	723	62.4	29.4	7.2	0.9	62.4	63.3	61.6
Georgia	2011	679	46.2	28.9	22.2	2.6	46.2	42.4	49.5
	2015	556	43.8	35.8	19.7	0.7	43.8	45.8	41.9
Germany	2011	567	65.2	20.0	14.6	0.1	65.2	66.8	63.7
	2015	563	62.0	21.1	16.0	0.9	62.0	62.8	61.3
Hong Kong SAR	2011	557	50.6	37.7	11.5	0.2	50.6	50.6	50.6
	2015	516	62.5	28.8	7.8	0.9	62.5	62.4	62.6
Hungary	2011	745	77.9	13.8	6.4	1.8	77.9	74.4	81.3
	2015	717	80.5	11.9	7.2	0.4	80.5	79.0	82.0
Iran, Islamic Rep. of	2011	825	60.8	24.7	12.9	1.5	60.8	58.9	62.8
	2015	541	41.3	31.3	20.9	6.5	41.3	36.9	46.5
Ireland	2011	647	58.7	35.3	5.9	0.2	58.7	59.1	58.2
	2015	622	56.5	38.8	4.3	0.3	56.5	56.0	57.0
Italy	2011	597	62.6	22.8	13.6	1.0	62.6	63.0	62.0
	2015	607	59.5	25.3	14.6	0.6	59.5	59.6	59.4
Japan	2011	627	63.1	32.9	3.4	0.6	63.1	63.7	62.5
	2015	622	63.0	32.2	4.1	0.6	63.0	60.9	65.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_06 (S051007): Life Science / Applying Type: CR 1 Point
Label: Importance of spiders

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	56.2	30.5	12.3	1.0	56.2	52.1	60.0
	2015	664	70.7	22.7	6.1	0.5	70.7	69.5	71.8
Korea, Rep. of	2011	619	67.9	28.0	4.0	0.0	67.9	67.5	68.3
	2015	673	70.8	27.1	2.1	0.1	70.8	71.7	69.8
Kuwait	2011	586	12.3	47.8	36.9	2.9	12.3	12.3	12.3
	2015	504	15.0	40.6	41.1	3.2	15.0	12.7	17.5
Lithuania	2011	670	67.6	27.1	5.3	0.0	67.6	68.8	66.5
	2015	638	68.5	25.2	6.4	0.0	68.5	64.5	72.3
Morocco	2011	1121	9.7	45.7	41.7	2.9	9.7	8.2	11.2
	2015	724	28.6	43.6	26.3	1.5	28.6	30.1	27.2
Netherlands	2011	461	66.6	31.4	1.3	0.7	66.6	69.2	63.8
	2015	640	63.4	31.8	3.3	1.4	63.4	66.7	60.1
New Zealand	2011	814	52.9	41.5	4.8	0.8	52.9	51.4	54.4
	2015	896	55.2	39.0	4.9	0.9	55.2	53.8	56.4
Northern Ireland	2011	503	48.4	44.7	6.7	0.2	48.4	51.9	45.3
	2015	445	48.1	45.4	6.5	0.0	48.1	49.5	46.7
Oman	2011	1487	20.8	54.6	23.2	1.4	20.8	22.0	19.8
	2015	1306	24.9	60.1	14.3	0.7	24.9	25.0	24.8
Portugal	2011	580	51.4	38.9	8.9	0.8	51.4	51.2	51.6
	2015	670	43.0	44.2	12.5	0.2	43.0	36.4	50.6
Qatar	2011	596	23.6	56.4	18.6	1.4	23.6	24.5	22.8
	2015	740	27.1	53.3	17.9	1.7	27.1	25.4	28.9
Russian Federation	2011	644	76.8	15.2	7.4	0.5	76.8	76.7	76.9
	2015	710	82.3	12.7	4.9	0.2	82.3	80.0	84.4
Saudi Arabia	2011	658	28.2	55.1	16.3	0.5	28.2	28.3	28.0
	2015	600	26.2	44.0	27.8	1.9	26.2	33.6	19.5
Serbia	2011	624	50.6	33.5	15.6	0.3	50.6	43.2	56.6
	2015	566	55.3	25.8	18.6	0.3	55.3	50.1	59.7
Singapore	2011	915	77.8	21.5	0.7	0.1	77.8	75.7	79.7
	2015	931	72.9	24.8	2.1	0.2	72.9	73.1	72.8
Slovak Republic	2011	809	76.5	14.5	8.8	0.2	76.5	73.6	79.3
	2015	838	71.6	18.5	9.6	0.3	71.6	71.1	72.1
Slovenia	2011	644	57.1	29.3	13.4	0.1	57.1	57.3	57.0
	2015	635	64.7	23.8	11.0	0.5	64.7	64.3	65.2
Spain	2011	613	48.7	36.0	14.1	1.2	48.7	45.0	52.0
	2015	1101	52.9	35.7	11.0	0.5	52.9	50.3	55.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_06 (S051007): Life Science / Applying Type: CR 1 Point
Label: Importance of spiders

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	53.4	32.1	13.8	0.8	53.4	55.3	51.3
	2015	587	53.5	32.4	13.0	1.2	53.5	56.0	51.6
Turkey	2011	1067	22.9	64.6	12.2	0.2	22.9	22.6	23.3
	2015	918	27.6	60.4	11.6	0.4	27.6	24.2	31.1
United Arab Emirates	2011	2087	26.6	51.3	20.8	1.3	26.6	26.8	26.5
	2015	3031	30.4	50.7	18.2	0.7	30.4	28.8	31.9
United States	2011	1762	74.1	23.7	1.5	0.7	74.1	75.1	72.9
	2015	1425	67.2	29.6	2.1	1.1	67.2	67.5	66.9

International Avg (n=40)	2011	30377	52.6	34.7	11.9	0.8	52.6	52.1	53.1
	2015	30627	54.0	33.8	11.2	1.0	54.0	53.5	54.6

Ontario, Canada	2011	648	63.4	30.3	4.2	2.0	63.4	62.3	64.5
	2015	658	58.5	36.2	3.8	1.4	58.5	59.2	57.8
Quebec, Canada	2011	616	65.3	28.8	5.5	0.4	65.3	66.0	64.6
	2015	398	74.8	21.3	3.1	0.8	74.8	73.9	75.6
Norway (4)	2011	436	46.8	36.1	16.2	0.9	46.8	48.4	45.0
	2015	599	47.5	37.0	13.8	1.6	47.5	43.3	51.8
Abu Dhabi, UAE	2011	592	25.1	52.1	21.4	1.3	25.1	26.4	24.0
	2015	716	26.3	53.8	18.9	1.0	26.3	21.5	30.1
Dubai, UAE	2011	865	33.8	47.6	17.3	1.3	33.8	32.5	34.9
	2015	1068	41.8	46.9	11.0	0.3	41.8	43.2	40.4
Florida, US	2011	376	73.0	24.3	1.6	1.0	73.0	73.6	72.4
	2015	289	70.3	27.2	1.8	0.6	70.3	70.4	70.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_07 (S051087): Physical Science / Applying Type: MC Key: B
Label: Reason to build bridge of steel

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	78.6	4.1	78.6	5.4	8.7	1.6	1.6	78.8	78.3
	2015	869	80.5	3.3	80.5	3.7	8.0	3.0	1.5	79.8	81.2
Bahrain	2011	574	56.3	18.5	56.3	8.4	15.1	0.8	1.0	55.3	57.2
	2015	586	55.4	12.9	55.4	9.7	18.3	1.9	1.8	58.4	52.3
Belgium (Flemish)	2011	683	81.3	4.3	81.3	2.6	10.3	1.0	0.4	81.4	81.2
	2015	761	85.2	2.9	85.2	2.5	7.6	1.4	0.4	85.2	85.1
Chile	2011	794	70.5	9.7	70.5	3.4	11.6	2.1	2.7	71.1	69.9
	2015	681	72.0	9.5	72.0	6.2	7.1	1.6	3.6	70.7	73.4
Chinese Taipei	2011	603	88.4	3.3	88.4	5.4	2.3	0.5	0.0	86.9	89.7
	2015	617	90.5	2.7	90.5	4.5	1.7	0.6	0.0	89.7	91.2
Croatia	2011	649	75.1	3.9	75.1	3.3	15.4	2.4	0.0	70.3	79.6
	2015	560	75.8	3.1	75.8	2.4	16.9	1.6	0.2	71.8	79.9
Czech Republic	2011	647	84.8	3.6	84.8	1.8	7.6	1.9	0.2	81.6	87.7
	2015	742	86.1	2.8	86.1	2.6	6.5	1.9	0.1	84.0	88.6
Denmark	2011	577	73.9	3.3	73.9	3.5	13.8	3.4	2.1	70.6	77.6
	2015	525	76.6	2.1	76.6	1.8	13.5	1.9	4.2	71.3	81.3
England	2011	494	83.1	3.3	83.1	2.2	9.4	1.5	0.4	82.2	84.1
	2015	577	85.5	3.0	85.5	1.5	8.6	0.9	0.5	82.6	88.3
Finland	2011	659	89.5	1.3	89.5	1.8	5.7	1.6	0.2	88.5	90.3
	2015	723	88.9	1.1	88.9	2.7	5.4	1.0	0.9	91.4	86.5
Georgia	2011	679	60.6	7.9	60.6	11.1	14.6	2.8	3.0	60.0	61.0
	2015	556	64.5	8.8	64.5	8.9	13.7	3.1	1.0	63.3	65.6
Germany	2011	567	84.8	3.3	84.8	1.7	7.2	2.7	0.3	84.4	85.2
	2015	563	84.4	2.7	84.4	3.1	4.5	4.4	0.9	83.5	85.2
Hong Kong SAR	2011	557	85.6	1.8	85.6	4.6	6.2	1.7	0.2	86.2	85.0
	2015	516	87.2	3.4	87.2	4.5	3.5	0.4	1.1	85.5	88.7
Hungary	2011	745	74.3	5.4	74.3	5.7	10.3	2.5	1.8	71.7	76.8
	2015	717	77.4	5.0	77.4	2.7	10.8	3.2	0.9	72.1	82.6
Iran, Islamic Rep. of	2011	825	56.9	6.4	56.9	8.5	23.9	2.4	1.8	52.1	61.8
	2015	541	51.4	11.9	51.4	5.2	22.7	2.2	6.6	46.5	57.0
Ireland	2011	647	84.6	6.4	84.6	1.5	6.2	1.0	0.3	84.2	84.9
	2015	622	84.8	4.8	84.8	1.1	8.2	0.5	0.6	84.6	84.9
Italy	2011	597	82.3	5.1	82.3	4.2	5.5	1.7	1.2	80.5	84.4
	2015	608	85.6	3.7	85.6	3.6	4.4	1.8	0.9	84.9	86.3
Japan	2011	627	82.5	5.5	82.5	3.5	4.8	3.0	0.6	83.3	81.8
	2015	622	84.9	3.9	84.9	2.7	4.7	2.9	0.8	84.0	85.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_07 (S051087): Physical Science / Applying Type: MC Key: B
Label: Reason to build bridge of steel

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	56.6	11.2	56.6	10.4	17.4	3.3	1.1	53.2	59.6
	2015	664	67.5	8.2	67.5	6.7	16.1	1.0	0.5	64.4	70.4
Korea, Rep. of	2011	619	93.6	2.7	93.6	0.9	2.6	0.3	0.0	91.4	95.6
	2015	673	94.0	0.7	94.0	1.5	2.8	0.7	0.4	94.2	93.7
Kuwait	2011	579	37.8	18.4	37.8	16.2	19.0	5.8	2.7	40.1	35.1
	2015	504	39.2	21.0	39.2	14.6	12.4	9.4	3.5	44.2	34.0
Lithuania	2011	670	83.6	3.5	83.6	5.5	6.4	1.0	0.0	81.1	85.8
	2015	638	87.5	2.2	87.5	2.7	5.7	1.5	0.2	83.4	91.6
Morocco	2011	995	36.7	17.6	36.7	20.0	22.7	2.5	0.5	36.8	36.7
	2015	721	40.3	13.4	40.3	20.0	21.1	3.4	1.8	36.6	43.7
Netherlands	2011	461	90.4	1.7	90.4	1.3	4.4	1.6	0.7	89.6	91.1
	2015	640	88.7	1.0	88.7	1.8	5.3	1.7	1.4	86.9	90.5
New Zealand	2011	814	74.6	7.2	74.6	4.3	11.2	1.9	0.9	76.6	72.6
	2015	896	79.3	3.4	79.3	4.3	10.4	1.8	0.9	78.1	80.4
Northern Ireland	2011	503	85.8	4.1	85.8	2.4	5.6	1.9	0.2	88.8	83.1
	2015	441	84.2	5.1	84.2	2.6	7.5	0.6	0.0	79.2	89.1
Oman	2011	1487	48.3	15.6	48.3	12.2	19.5	2.6	1.8	45.8	50.5
	2015	1303	53.2	12.9	53.2	12.3	18.4	2.4	0.8	52.7	53.7
Portugal	2011	580	72.7	6.6	72.7	4.7	13.1	2.1	0.8	69.0	76.5
	2015	670	71.7	5.9	71.7	7.4	12.3	2.3	0.3	69.4	74.5
Qatar	2011	596	47.3	14.8	47.3	12.1	23.1	1.3	1.4	43.9	50.1
	2015	740	55.8	11.2	55.8	9.1	19.7	2.2	2.0	59.1	52.2
Russian Federation	2011	644	85.4	3.6	85.4	2.8	6.0	1.5	0.7	85.6	85.2
	2015	710	90.8	1.6	90.8	1.5	4.8	1.1	0.2	88.5	92.9
Saudi Arabia	2011	655	53.3	13.8	53.3	10.7	18.7	2.7	0.9	53.8	52.8
	2015	599	45.5	17.0	45.5	13.4	17.0	4.7	2.4	48.0	43.2
Serbia	2011	624	76.3	7.6	76.3	1.3	12.7	1.3	0.9	68.7	82.3
	2015	566	79.6	5.3	79.6	1.8	10.0	2.2	0.9	78.8	80.4
Singapore	2011	915	79.7	4.7	79.7	8.5	6.8	0.2	0.1	78.2	81.1
	2015	931	84.6	3.2	84.6	5.6	5.6	0.7	0.3	86.0	83.2
Slovak Republic	2011	809	80.8	6.6	80.8	1.9	9.2	1.3	0.2	79.5	82.1
	2015	838	80.2	6.8	80.2	4.6	6.7	1.3	0.4	74.6	85.4
Slovenia	2011	642	70.4	7.6	70.4	5.8	13.9	2.0	0.1	66.8	73.8
	2015	635	76.1	7.9	76.1	3.6	10.6	1.0	0.9	74.2	78.1
Spain	2011	613	72.7	8.8	72.7	3.3	11.7	1.9	1.6	71.5	73.8
	2015	1101	77.3	7.1	77.3	4.1	9.9	0.8	0.9	77.8	76.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_07 (S051087): Physical Science / Applying Type: MC Key: B
Label: Reason to build bridge of steel

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	80.9	2.8	80.9	2.6	11.6	1.2	0.8	77.2	84.7
	2015	587	80.6	4.3	80.6	2.2	9.6	2.2	1.2	79.4	82.2
Turkey	2011	1067	64.1	11.9	64.1	10.1	11.9	1.7	0.4	64.8	63.4
	2015	918	73.0	10.2	73.0	7.1	8.6	0.7	0.5	74.5	71.4
United Arab Emirates	2011	2087	55.2	13.7	55.2	9.3	17.6	2.6	1.5	53.4	56.9
	2015	3030	60.7	10.8	60.7	10.5	15.2	1.9	0.9	58.6	62.6
United States	2011	1762	86.1	4.4	86.1	2.6	4.8	1.4	0.8	85.2	87.1
	2015	1425	85.6	4.3	85.6	2.3	4.6	2.0	1.3	84.0	87.2

International Avg (n=40)	2011	30239	73.1	7.2	73.1	5.7	11.2	1.9	0.9	71.7	74.4
	2015	30616	75.3	6.3	75.3	5.2	10.0	2.0	1.2	74.1	76.5

Ontario, Canada	2011	648	82.3	3.9	82.3	1.4	8.6	1.7	2.0	78.7	85.8
	2015	655	81.5	4.4	81.5	2.1	9.4	1.1	1.5	80.8	82.3
Quebec, Canada	2011	616	59.7	15.3	59.7	5.6	17.4	1.6	0.4	54.3	65.3
	2015	398	72.7	10.3	72.7	2.8	12.8	0.5	0.8	68.5	76.7
Norway (4)	2011	436	76.7	3.7	76.7	3.2	11.9	2.8	1.6	71.7	82.3
	2015	599	79.7	3.8	79.7	3.4	8.7	1.9	2.5	75.1	84.3
Abu Dhabi, UAE	2011	592	49.2	15.2	49.2	11.8	19.9	2.4	1.6	50.5	48.0
	2015	716	57.2	12.0	57.2	12.6	15.3	1.6	1.3	53.4	60.2
Dubai, UAE	2011	865	65.7	10.4	65.7	6.3	14.7	1.6	1.4	61.7	68.9
	2015	1067	71.2	6.6	71.2	6.8	13.2	1.5	0.6	70.2	72.2
Florida, US	2011	376	87.4	3.7	87.4	1.6	4.0	2.2	1.0	91.0	83.9
	2015	289	89.0	4.4	89.0	1.7	3.7	0.7	0.6	87.7	90.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S06_08Z (S051188Z): Physical Science / Knowing Type: CR 1 Point
Label: Energy used by people (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	40.7	54.7	3.0	1.6	40.7	41.2	40.3
	2015	869	38.2	57.4	2.3	2.0	38.2	36.6	39.8
Bahrain	2011	574	20.1	72.1	6.8	1.0	20.1	21.0	19.3
	2015	586	25.2	70.5	2.5	1.8	25.2	27.0	23.4
Belgium (Flemish)	2011	683	53.5	44.8	0.9	0.7	53.5	48.9	58.0
	2015	761	55.2	42.9	1.5	0.4	55.2	51.7	58.7
Chile	2011	794	32.9	59.0	5.1	2.9	32.9	26.9	39.7
	2015	681	35.1	58.3	2.8	3.8	35.1	31.6	38.8
Chinese Taipei	2011	603	61.1	38.5	0.5	0.0	61.1	53.3	67.6
	2015	617	66.4	33.1	0.5	0.0	66.4	63.6	69.1
Croatia	2011	649	50.7	46.9	2.4	0.0	50.7	49.8	51.5
	2015	560	59.1	36.8	4.0	0.2	59.1	56.6	61.6
Czech Republic	2011	647	55.3	42.7	1.8	0.2	55.3	50.3	59.5
	2015	742	54.5	44.0	1.5	0.1	54.5	49.7	60.0
Denmark	2011	577	56.5	38.4	2.7	2.3	56.5	56.5	56.5
	2015	525	55.0	37.5	3.3	4.2	55.0	51.9	57.8
England	2011	494	38.5	57.6	3.3	0.6	38.5	35.6	41.4
	2015	577	33.0	64.5	2.0	0.5	33.0	34.0	32.0
Finland	2011	659	77.4	21.6	0.7	0.2	77.4	73.6	80.7
	2015	723	70.3	28.2	0.6	0.9	70.3	69.8	70.8
Georgia	2011	668	22.2	69.2	5.5	3.1	22.2	23.5	21.0
	2015	556	20.9	71.9	6.1	1.1	20.9	22.0	19.8
Germany	2011	567	63.7	34.7	1.3	0.3	63.7	58.8	68.3
	2015	563	53.8	43.1	2.3	0.9	53.8	50.1	57.1
Hong Kong SAR	2011	557	71.7	27.2	0.9	0.2	71.7	70.5	72.7
	2015	516	69.0	29.7	0.2	1.1	69.0	61.9	75.2
Hungary	2011	745	56.8	40.2	1.1	2.0	56.8	56.1	57.4
	2015	717	57.2	40.6	1.0	1.3	57.2	52.1	62.1
Iran, Islamic Rep. of	2011	824	34.9	56.3	6.9	1.9	34.9	34.6	35.2
	2015	541	24.5	63.8	4.8	6.9	24.5	26.3	22.5
Ireland	2011	647	51.2	47.6	0.7	0.5	51.2	46.1	56.2
	2015	622	49.9	48.9	0.5	0.7	49.9	49.1	50.5
Italy	2011	597	46.4	50.6	1.6	1.4	46.4	46.3	46.5
	2015	608	51.7	46.1	1.2	1.0	51.7	49.7	53.4
Japan	2011	627	55.8	42.7	0.6	1.0	55.8	54.1	57.5
	2015	622	52.8	45.5	0.9	0.8	52.8	49.0	56.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_08Z (S051188Z): Physical Science / Knowing Type: CR 1 Point
Label: Energy used by people (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	20.2	75.0	3.3	1.6	20.2	22.3	18.2
	2015	663	43.1	55.1	1.3	0.5	43.1	40.5	45.5
Korea, Rep. of	2011	619	64.2	35.4	0.3	0.0	64.2	60.6	67.7
	2015	673	55.7	43.8	0.1	0.4	55.7	48.4	62.7
Kuwait	2011	565	8.1	76.8	12.3	2.8	8.1	10.9	4.5
	2015	503	10.2	75.8	10.4	3.6	10.2	10.2	10.2
Lithuania	2011	670	48.8	49.1	2.1	0.0	48.8	44.4	52.6
	2015	638	46.2	52.7	0.8	0.3	46.2	41.1	51.2
Morocco	2011	848	14.8	79.0	5.6	0.6	14.8	11.7	18.0
	2015	713	15.3	74.4	8.5	1.8	15.3	16.9	13.8
Netherlands	2011	461	58.2	40.0	1.1	0.7	58.2	52.9	64.1
	2015	640	55.5	40.8	2.0	1.7	55.5	55.6	55.4
New Zealand	2011	814	44.5	50.8	3.8	0.9	44.5	42.8	46.1
	2015	896	44.1	50.6	4.2	1.0	44.1	43.7	44.5
Northern Ireland	2011	503	41.4	55.6	1.7	1.3	41.4	42.6	40.3
	2015	404	47.3	52.7	0.0	0.0	47.3	47.3	47.2
Oman	2011	1487	31.3	58.9	7.9	1.9	31.3	35.0	28.0
	2015	1294	37.2	57.2	4.5	1.1	37.2	40.7	33.7
Portugal	2011	580	47.2	51.1	0.8	0.8	47.2	46.7	47.7
	2015	670	45.8	52.4	1.0	0.9	45.8	43.6	48.4
Qatar	2011	596	26.4	64.6	7.4	1.5	26.4	26.7	26.2
	2015	740	25.7	65.2	7.1	2.0	25.7	23.3	28.3
Russian Federation	2011	644	38.7	58.8	1.6	0.8	38.7	35.5	41.9
	2015	710	41.9	57.6	0.4	0.2	41.9	38.6	44.8
Saudi Arabia	2011	632	20.3	74.8	3.6	1.3	20.3	19.1	21.5
	2015	591	15.8	72.6	9.0	2.6	15.8	16.0	15.6
Serbia	2011	624	64.1	32.1	2.9	0.9	64.1	61.8	65.9
	2015	566	65.1	30.4	3.3	1.2	65.1	67.7	62.8
Singapore	2011	915	20.5	79.3	0.2	0.1	20.5	15.4	25.1
	2015	931	22.3	77.0	0.3	0.5	22.3	19.2	25.2
Slovak Republic	2011	809	51.4	47.2	1.2	0.2	51.4	45.1	57.6
	2015	838	58.0	40.0	1.7	0.4	58.0	53.1	62.7
Slovenia	2011	643	52.4	45.1	2.3	0.2	52.4	53.3	51.6
	2015	635	60.3	37.6	1.2	1.0	60.3	59.4	61.2
Spain	2011	613	53.6	42.2	2.6	1.6	53.6	50.2	56.5
	2015	1101	44.7	53.2	1.2	1.0	44.7	41.2	48.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_08Z (S051188Z): Physical Science / Knowing Type: CR 1 Point
Label: Energy used by people (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	64.8	32.1	2.1	0.9	64.8	63.7	65.9
	2015	587	61.5	36.3	1.0	1.2	61.5	60.4	62.5
Turkey	2011	1066	36.2	60.0	3.2	0.6	36.2	34.5	37.8
	2015	917	32.8	64.6	2.2	0.5	32.8	34.5	31.1
United Arab Emirates	2011	2087	24.5	70.7	3.0	1.8	24.5	24.7	24.2
	2015	3027	32.9	62.1	4.0	1.0	32.9	31.1	34.5
United States	2011	1762	52.3	45.5	1.2	1.1	52.3	49.2	55.6
	2015	1425	49.1	47.1	2.2	1.6	49.1	47.3	51.0

International Avg (n=40)	2011	30043	44.3	51.7	2.9	1.0	44.3	42.4	46.2
	2015	30548	44.6	51.6	2.6	1.3	44.6	42.8	46.2

Ontario, Canada	2011	648	48.5	48.0	1.3	2.3	48.5	47.3	49.6
	2015	654	48.5	47.9	1.6	2.0	48.5	48.6	48.5
Quebec, Canada	2011	616	57.6	41.2	0.7	0.4	57.6	54.7	60.6
	2015	395	64.0	33.8	1.4	0.8	64.0	62.0	65.9
Norway (4)	2011	436	57.0	38.8	2.4	1.7	57.0	58.1	55.9
	2015	599	46.5	47.3	3.8	2.5	46.5	41.8	51.2
Abu Dhabi, UAE	2011	592	16.3	78.4	3.4	2.0	16.3	19.0	13.7
	2015	715	23.5	69.3	5.9	1.3	23.5	21.0	25.5
Dubai, UAE	2011	865	35.7	60.2	2.5	1.6	35.7	34.4	36.8
	2015	1067	46.8	50.4	2.2	0.6	46.8	48.0	45.7
Florida, US	2011	376	52.2	42.8	2.8	2.2	52.2	46.8	57.5
	2015	289	53.0	44.3	2.1	0.6	53.0	52.0	54.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_10 (S051201): Physical Science / Applying Type: CR 1 Point
Label: Sweater around bottle of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	50.9	40.0	6.7	2.4	50.9	54.2	48.1
	2015	869	51.0	41.1	5.3	2.6	51.0	53.0	49.2
Bahrain	2011	574	27.7	52.7	17.8	1.7	27.7	34.2	21.5
	2015	586	31.9	49.2	16.7	2.2	31.9	36.1	27.6
Belgium (Flemish)	2011	683	52.1	42.8	4.3	0.7	52.1	54.9	49.4
	2015	761	46.8	45.8	6.7	0.7	46.8	49.8	43.7
Chile	2011	794	36.6	46.5	12.3	4.5	36.6	35.7	37.5
	2015	680	38.8	42.1	13.8	5.3	38.8	37.7	40.1
Chinese Taipei	2011	603	28.3	55.8	15.9	0.0	28.3	31.3	25.8
	2015	617	28.3	55.3	16.3	0.2	28.3	27.0	29.5
Croatia	2011	649	51.5	30.7	17.8	0.0	51.5	56.6	46.6
	2015	560	46.5	42.9	10.5	0.2	46.5	49.1	43.9
Czech Republic	2011	647	44.7	40.8	13.8	0.7	44.7	42.7	46.4
	2015	742	39.0	41.9	18.9	0.2	39.0	39.1	38.8
Denmark	2011	577	50.2	38.9	7.9	3.0	50.2	50.6	49.7
	2015	525	48.6	38.4	6.9	6.1	48.6	53.1	44.6
England	2011	494	49.8	42.7	6.5	1.0	49.8	47.4	52.0
	2015	577	61.7	32.9	4.6	0.9	61.7	62.6	60.7
Finland	2011	659	63.6	24.9	11.3	0.2	63.6	66.4	61.4
	2015	723	66.5	24.7	7.5	1.3	66.5	68.6	64.6
Georgia	2011	679	26.3	41.9	28.1	3.7	26.3	27.1	25.7
	2015	556	29.3	45.2	22.1	3.5	29.3	25.8	32.8
Germany	2011	567	39.0	37.8	22.6	0.6	39.0	36.7	41.1
	2015	563	43.3	36.5	19.3	0.9	43.3	47.8	39.4
Hong Kong SAR	2011	557	14.4	69.5	15.8	0.3	14.4	13.3	15.3
	2015	516	26.7	65.6	6.6	1.1	26.7	27.7	25.8
Hungary	2011	745	45.7	39.0	12.8	2.4	45.7	44.8	46.6
	2015	717	46.2	41.1	10.9	1.9	46.2	46.9	45.5
Iran, Islamic Rep. of	2011	825	28.7	49.3	18.9	3.1	28.7	28.8	28.5
	2015	541	26.5	46.3	19.3	7.9	26.5	25.0	28.2
Ireland	2011	647	60.5	33.7	5.2	0.6	60.5	65.0	56.1
	2015	622	58.6	37.0	3.5	0.9	58.6	61.7	55.9
Italy	2011	597	41.6	38.7	18.3	1.4	41.6	44.3	38.5
	2015	606	38.7	42.6	16.7	2.0	38.7	38.4	38.9
Japan	2011	627	46.1	47.1	5.8	1.0	46.1	45.3	46.8
	2015	622	48.9	43.3	7.0	0.8	48.9	48.2	49.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_10 (S051201): Physical Science / Applying Type: CR 1 Point
Label: Sweater around bottle of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	46.2	34.9	16.9	1.9	46.2	46.7	45.8
	2015	664	51.8	39.6	7.5	1.1	51.8	52.9	50.8
Korea, Rep. of	2011	619	65.9	33.1	1.1	0.0	65.9	64.2	67.5
	2015	673	35.5	62.2	1.9	0.4	35.5	31.2	39.7
Kuwait	2011	586	9.2	45.9	40.5	4.4	9.2	11.9	6.0
	2015	504	9.1	38.2	47.8	4.9	9.1	10.6	7.5
Lithuania	2011	670	50.3	38.7	10.8	0.3	50.3	53.7	47.3
	2015	638	53.4	37.3	9.0	0.3	53.4	57.3	49.6
Morocco	2011	1118	2.3	37.8	55.9	4.0	2.3	2.0	2.7
	2015	725	11.0	49.5	36.9	2.6	11.0	11.6	10.5
Netherlands	2011	461	54.7	41.0	3.7	0.7	54.7	54.5	55.2
	2015	640	48.1	44.7	5.2	2.0	48.1	51.0	45.2
New Zealand	2011	814	47.6	41.0	10.0	1.3	47.6	51.8	43.6
	2015	896	47.0	42.8	8.1	2.1	47.0	50.4	44.0
Northern Ireland	2011	503	58.8	34.4	5.5	1.3	58.8	59.1	58.5
	2015	445	59.4	36.2	4.3	0.2	59.4	56.7	61.9
Oman	2011	1487	8.3	53.2	35.5	2.9	8.3	9.3	7.5
	2015	1307	14.0	63.9	21.0	1.2	14.0	12.8	15.1
Portugal	2011	580	53.5	38.9	6.1	1.5	53.5	56.3	50.7
	2015	670	51.2	40.2	7.4	1.2	51.2	53.3	48.6
Qatar	2011	596	17.9	55.5	24.9	1.7	17.9	20.4	15.7
	2015	740	17.9	61.1	18.1	2.9	17.9	16.2	19.8
Russian Federation	2011	644	45.6	40.9	12.3	1.2	45.6	46.9	44.2
	2015	710	49.3	41.3	9.1	0.4	49.3	49.2	49.3
Saudi Arabia	2011	658	26.5	50.4	21.5	1.6	26.5	29.1	23.8
	2015	602	27.6	36.6	32.7	3.1	27.6	37.7	18.5
Serbia	2011	624	28.4	51.5	18.6	1.6	28.4	25.3	30.8
	2015	566	46.1	29.6	22.4	1.9	46.1	45.5	46.6
Singapore	2011	915	56.2	42.4	1.4	0.1	56.2	53.3	58.8
	2015	931	59.5	38.5	1.5	0.5	59.5	61.1	58.0
Slovak Republic	2011	809	49.9	37.4	12.4	0.3	49.9	48.8	50.9
	2015	838	44.2	39.9	15.6	0.4	44.2	42.2	46.0
Slovenia	2011	644	34.8	46.4	18.2	0.6	34.8	35.8	33.9
	2015	635	47.0	38.8	13.0	1.2	47.0	46.9	47.1
Spain	2011	613	37.6	43.2	16.8	2.3	37.6	34.7	40.3
	2015	1101	51.6	38.3	9.0	1.1	51.6	53.1	50.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_10 (S051201): Physical Science / Applying Type: CR 1 Point
Label: Sweater around bottle of water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	47.6	38.6	12.7	1.0	47.6	48.7	46.5
	2015	587	52.1	37.6	8.4	1.9	52.1	53.7	50.4
Turkey	2011	1067	30.7	58.0	10.6	0.7	30.7	26.5	34.8
	2015	918	38.5	50.6	10.1	0.7	38.5	38.3	38.8
United Arab Emirates	2011	2087	20.3	51.1	26.4	2.3	20.3	23.0	17.6
	2015	3031	20.9	54.8	23.0	1.3	20.9	21.6	20.4
United States	2011	1762	48.5	47.0	3.1	1.4	48.5	50.3	46.4
	2015	1425	49.7	44.0	4.0	2.3	49.7	50.5	48.8

International Avg (n=40)	2011	30374	40.0	43.4	15.2	1.5	40.0	40.8	39.1
	2015	30629	41.6	43.4	13.2	1.8	41.6	42.5	40.6

Ontario, Canada	2011	648	51.8	40.2	5.4	2.7	51.8	53.1	50.6
	2015	658	49.9	43.1	4.5	2.5	49.9	51.1	49.0
Quebec, Canada	2011	616	44.5	46.2	8.6	0.6	44.5	47.1	41.9
	2015	398	44.3	48.4	6.4	0.9	44.3	44.2	44.3
Norway (4)	2011	436	36.7	45.5	14.9	2.9	36.7	37.7	35.7
	2015	599	37.1	45.7	14.0	3.2	37.1	37.7	36.5
Abu Dhabi, UAE	2011	592	16.1	52.9	28.2	2.8	16.1	18.6	13.8
	2015	716	18.3	54.3	25.8	1.5	18.3	20.3	16.7
Dubai, UAE	2011	865	27.3	49.6	21.2	1.9	27.3	31.4	24.0
	2015	1068	32.3	54.9	11.8	0.9	32.3	33.3	31.3
Florida, US	2011	376	45.6	47.2	4.6	2.7	45.6	48.6	42.6
	2015	289	50.2	42.4	6.2	1.1	50.2	48.5	52.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_l1 (S051102): Earth Science / Knowing Type: MC Key: A
Label: Direction water flows

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	57.6	57.6	8.6	15.0	13.4	3.0	2.4	53.6	61.1
	2015	869	52.5	52.5	9.7	17.1	14.5	3.5	2.6	43.8	60.8
Bahrain	2011	574	33.7	33.7	14.2	29.0	17.5	3.9	1.7	33.9	33.5
	2015	586	38.4	38.4	12.6	27.1	14.1	5.2	2.5	42.8	33.9
Belgium (Flemish)	2011	683	60.3	60.3	11.0	14.4	11.2	2.3	0.7	52.3	67.9
	2015	761	64.3	64.3	12.5	13.6	7.8	1.0	0.9	56.8	71.8
Chile	2011	794	49.1	49.1	10.6	17.5	15.7	2.1	5.1	43.9	54.9
	2015	680	48.6	48.6	12.1	12.5	18.3	3.0	5.5	46.3	51.1
Chinese Taipei	2011	603	79.8	79.8	10.1	5.4	3.8	0.8	0.0	74.3	84.5
	2015	617	81.5	81.5	9.0	4.9	4.2	0.3	0.2	78.1	84.6
Croatia	2011	649	69.6	69.6	5.1	14.1	9.1	1.7	0.4	70.0	69.2
	2015	560	69.0	69.0	5.0	13.6	10.4	1.7	0.2	62.3	75.8
Czech Republic	2011	647	77.6	77.6	3.8	10.5	5.6	1.6	0.9	74.5	80.3
	2015	742	79.3	79.3	4.5	7.5	7.6	0.8	0.3	77.4	81.5
Denmark	2011	577	53.8	53.8	10.5	13.5	14.2	5.1	3.0	48.1	60.2
	2015	525	50.7	50.7	8.8	14.9	13.9	5.0	6.8	43.7	56.9
England	2011	494	57.1	57.1	9.8	16.6	13.1	2.4	1.0	58.0	56.3
	2015	577	57.2	57.2	8.1	18.2	13.0	2.4	1.2	52.9	61.4
Finland	2011	659	64.4	64.4	8.2	13.3	11.5	2.3	0.3	59.6	68.4
	2015	723	55.1	55.1	7.9	20.0	13.4	2.3	1.3	53.3	56.7
Georgia	2011	679	61.4	61.4	7.1	10.8	10.8	5.3	4.5	59.7	62.9
	2015	556	63.7	63.7	4.7	8.8	14.3	3.4	5.0	62.5	64.9
Germany	2011	567	67.7	67.7	5.5	12.9	9.5	3.7	0.6	60.9	74.1
	2015	563	67.7	67.7	3.9	11.0	12.2	3.8	1.4	65.6	69.6
Hong Kong SAR	2011	557	69.5	69.5	11.8	9.3	7.9	1.2	0.3	63.8	74.1
	2015	516	75.9	75.9	9.5	8.9	4.4	0.2	1.2	69.8	81.2
Hungary	2011	745	66.6	66.6	4.9	11.9	10.6	2.6	3.5	62.4	70.7
	2015	717	66.4	66.4	5.7	13.8	9.8	2.1	2.1	58.8	73.7
Iran, Islamic Rep. of	2011	825	65.0	65.0	10.8	10.8	6.8	3.3	3.4	61.3	68.7
	2015	541	55.5	55.5	11.9	11.3	8.9	2.9	9.5	51.4	60.2
Ireland	2011	647	61.8	61.8	7.1	16.3	12.5	1.8	0.6	58.2	65.2
	2015	622	66.0	66.0	9.5	10.5	12.0	1.0	1.0	60.9	70.4
Italy	2011	597	75.5	75.5	4.7	6.8	9.0	2.0	1.9	75.0	76.0
	2015	608	75.2	75.2	3.7	7.1	8.3	2.9	2.9	73.0	77.2
Japan	2011	627	80.5	80.5	5.1	4.8	8.5	0.1	1.0	76.4	84.6
	2015	622	79.1	79.1	4.7	7.6	6.9	1.0	0.8	74.0	83.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_l1 (S051102): Earth Science / Knowing Type: MC Key: A
Label: Direction water flows

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	627	61.3	61.3	4.4	10.1	20.6	1.1	2.4	59.0	63.5
	2015	664	68.1	68.1	4.6	9.0	16.0	1.0	1.3	61.8	73.8
Korea, Rep. of	2011	619	81.5	81.5	5.1	6.9	6.0	0.5	0.0	79.5	83.4
	2015	673	82.1	82.1	6.5	8.2	2.7	0.1	0.5	76.4	87.6
Kuwait	2011	576	22.8	22.8	21.3	31.6	12.7	7.7	3.9	19.2	27.2
	2015	504	29.1	29.1	16.2	22.8	13.0	13.1	5.7	29.2	29.0
Lithuania	2011	670	47.9	47.9	8.6	22.6	18.0	2.6	0.3	44.6	50.8
	2015	638	51.7	51.7	8.0	17.1	20.3	2.5	0.5	52.8	50.7
Morocco	2011	954	35.9	35.9	19.2	27.0	12.8	3.2	1.9	36.0	35.8
	2015	715	34.3	34.3	19.5	25.6	11.9	5.0	3.7	36.4	32.5
Netherlands	2011	461	74.4	74.4	5.9	7.5	10.4	1.2	0.7	69.3	80.3
	2015	640	72.8	72.8	4.9	8.5	9.9	1.6	2.3	67.7	77.9
New Zealand	2011	814	53.9	53.9	7.5	18.8	13.4	4.7	1.7	45.6	61.9
	2015	896	57.5	57.5	7.0	16.0	12.9	4.2	2.5	52.8	61.7
Northern Ireland	2011	503	51.6	51.6	11.0	18.3	15.2	2.5	1.3	45.3	57.3
	2015	435	57.9	57.9	12.2	14.8	14.5	0.6	0.0	52.0	63.7
Oman	2011	1487	37.9	37.9	16.5	23.3	14.3	4.7	3.4	37.9	37.9
	2015	1306	44.9	44.9	13.4	21.1	15.3	3.5	1.8	42.9	46.9
Portugal	2011	580	70.1	70.1	4.1	14.0	9.2	1.0	1.6	66.0	74.1
	2015	670	66.4	66.4	7.8	14.0	8.8	1.5	1.5	62.0	71.6
Qatar	2011	596	37.2	37.2	14.8	25.9	16.7	3.2	2.2	34.1	39.9
	2015	740	36.4	36.4	15.2	25.5	14.5	4.6	3.7	33.8	39.3
Russian Federation	2011	644	66.4	66.4	4.3	11.7	15.0	0.8	1.7	70.0	62.9
	2015	710	71.7	71.7	5.9	7.5	13.4	0.9	0.7	68.5	74.6
Saudi Arabia	2011	657	34.6	34.6	12.3	35.9	13.5	1.4	2.2	30.3	39.1
	2015	598	31.1	31.1	17.2	28.6	15.7	3.6	3.8	32.1	30.1
Serbia	2011	624	68.6	68.6	5.3	9.4	11.3	3.5	1.7	67.0	70.0
	2015	566	64.8	64.8	6.0	11.0	13.7	2.5	2.0	60.0	68.9
Singapore	2011	915	46.0	46.0	15.3	17.8	20.5	0.3	0.1	36.7	54.5
	2015	931	49.5	49.5	13.4	16.7	19.4	0.5	0.5	44.4	54.2
Slovak Republic	2011	809	75.5	75.5	6.9	9.9	6.5	0.8	0.5	72.8	78.1
	2015	838	75.7	75.7	5.6	9.5	7.6	0.9	0.7	73.4	78.0
Slovenia	2011	643	59.7	59.7	6.2	13.8	15.5	3.8	1.1	56.3	62.8
	2015	635	63.4	63.4	6.2	14.9	12.0	2.2	1.3	57.4	69.8
Spain	2011	613	68.0	68.0	6.0	11.9	8.6	2.8	2.6	65.0	70.7
	2015	1101	74.2	74.2	7.1	8.0	7.9	1.2	1.6	72.1	76.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S06_l1 (S051102): Earth Science / Knowing Type: MC Key: A
Label: Direction water flows

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	676	57.0	57.0	9.2	14.1	15.3	3.3	1.1	55.5	58.5
	2015	586	66.8	66.8	7.9	8.4	13.4	1.4	2.0	60.7	73.7
Turkey	2011	1067	42.0	42.0	17.0	21.0	18.0	0.9	1.1	42.5	41.6
	2015	918	47.2	47.2	17.1	16.6	17.7	0.7	0.7	43.5	50.9
United Arab Emirates	2011	2087	44.0	44.0	13.9	20.4	15.1	4.1	2.6	38.5	49.2
	2015	3031	44.9	44.9	12.5	20.6	16.6	3.5	1.8	41.0	48.5
United States	2011	1762	57.6	57.6	7.4	21.7	10.3	1.3	1.7	56.4	59.0
	2015	1425	58.8	58.8	6.1	18.7	11.5	2.5	2.5	54.3	63.6

International Avg (n=40)	2011	30198	58.6	58.6	9.3	15.7	12.2	2.5	1.7	55.3	61.8
	2015	30605	59.9	59.9	9.1	14.3	12.1	2.5	2.2	56.2	63.5

Ontario, Canada	2011	648	40.5	40.5	8.6	30.9	14.5	2.7	2.8	34.4	46.4
	2015	656	46.3	46.3	6.6	26.2	15.7	2.1	3.0	42.0	50.4
Quebec, Canada	2011	616	57.5	57.5	7.1	17.3	14.0	3.0	1.1	53.0	62.2
	2015	395	61.5	61.5	6.7	13.9	14.8	2.1	0.9	54.6	68.2
Norway (4)	2011	436	69.6	69.6	5.3	6.8	11.4	3.7	3.1	60.0	80.3
	2015	599	62.2	62.2	8.4	6.4	16.6	2.7	3.6	59.6	64.9
Abu Dhabi, UAE	2011	592	40.4	40.4	15.5	21.7	15.5	3.6	3.2	37.5	43.2
	2015	716	37.1	37.1	14.3	24.9	18.4	3.2	2.0	29.2	43.5
Dubai, UAE	2011	865	54.1	54.1	11.6	16.5	12.4	3.5	1.9	44.7	61.8
	2015	1068	57.5	57.5	10.6	15.6	13.4	1.7	1.3	55.3	59.7
Florida, US	2011	376	45.3	45.3	11.2	26.6	11.7	2.5	2.7	40.1	50.5
	2015	289	54.3	54.3	8.7	26.3	7.3	2.0	1.4	50.5	58.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S06_l2 (S051095): Earth Science / Reasoning Type: CR 1 Point
Label: Air inside the balloon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	890	59.6	36.3	1.5	2.6	59.6	61.6	58.0
	2015	869	62.4	34.7	0.2	2.7	62.4	65.7	59.3
Bahrain	2011	574	47.4	47.3	3.2	2.1	47.4	54.4	40.6
	2015	586	41.1	54.8	1.0	3.1	41.1	44.0	38.2
Belgium (Flemish)	2011	683	72.5	25.2	1.1	1.3	72.5	74.8	70.3
	2015	761	70.3	28.2	0.6	0.9	70.3	74.0	66.6
Chile	2011	794	65.4	27.6	1.6	5.4	65.4	67.2	63.4
	2015	680	63.4	29.6	1.2	5.7	63.4	69.3	57.2
Chinese Taipei	2011	603	47.7	42.5	9.8	0.0	47.7	51.9	44.1
	2015	617	52.5	47.2	0.1	0.2	52.5	53.7	51.4
Croatia	2011	649	61.2	37.3	1.0	0.4	61.2	63.0	59.5
	2015	560	63.7	35.9	0.3	0.2	63.7	68.9	58.3
Czech Republic	2011	647	61.2	37.4	0.5	0.9	61.2	69.6	54.0
	2015	742	63.1	35.5	1.0	0.4	63.1	67.7	57.8
Denmark	2011	576	58.7	37.7	0.5	3.1	58.7	62.5	54.3
	2015	525	52.6	39.6	1.1	6.8	52.6	62.6	43.5
England	2011	494	65.8	31.9	1.0	1.3	65.8	72.6	59.2
	2015	577	62.6	35.1	1.0	1.3	62.6	66.8	58.4
Finland	2011	659	59.8	39.8	0.1	0.3	59.8	63.1	57.0
	2015	723	59.5	38.2	0.8	1.5	59.5	71.0	49.1
Georgia	2011	679	42.4	47.6	5.3	4.8	42.4	46.7	38.8
	2015	556	41.6	50.8	1.9	5.6	41.6	42.4	40.8
Germany	2011	567	55.4	42.5	0.9	1.2	55.4	60.5	50.5
	2015	563	59.9	38.1	0.3	1.7	59.9	68.3	52.4
Hong Kong SAR	2011	557	47.6	51.2	0.9	0.3	47.6	52.7	43.5
	2015	516	60.1	38.4	0.0	1.4	60.1	62.7	57.8
Hungary	2011	745	62.3	33.6	0.3	3.8	62.3	67.4	57.4
	2015	717	67.8	29.1	0.7	2.4	67.8	71.2	64.6
Iran, Islamic Rep. of	2011	825	54.5	40.5	1.3	3.7	54.5	59.2	49.7
	2015	541	43.0	46.2	1.1	9.8	43.0	49.3	35.5
Ireland	2011	647	63.4	34.4	1.4	0.7	63.4	73.7	53.4
	2015	622	57.9	40.4	0.5	1.2	57.9	66.9	50.2
Italy	2011	596	66.4	30.9	0.7	2.1	66.4	67.7	64.7
	2015	605	66.0	30.7	0.1	3.1	66.0	65.0	66.9
Japan	2011	627	81.9	17.1	0.0	1.0	81.9	82.1	81.6
	2015	622	77.0	21.9	0.3	0.8	77.0	78.7	75.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_l2 (S051095): Earth Science / Reasoning Type: CR 1 Point
Label: Air inside the balloon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	59.9	27.7	9.9	2.5	59.9	63.5	56.6
	2015	664	77.2	19.6	1.8	1.3	77.2	81.7	73.1
Korea, Rep. of	2011	619	81.7	18.0	0.3	0.0	81.7	83.5	80.0
	2015	673	83.8	15.2	0.5	0.5	83.8	85.7	81.9
Kuwait	2011	587	12.0	77.3	5.5	5.3	12.0	15.6	7.6
	2015	503	9.9	82.0	2.1	6.0	9.9	12.2	7.4
Lithuania	2011	670	65.6	32.9	1.1	0.4	65.6	71.1	60.8
	2015	638	80.3	18.9	0.3	0.5	80.3	85.7	75.0
Morocco	2011	1122	1.2	82.3	9.8	6.7	1.2	0.6	1.7
	2015	726	19.8	74.0	2.0	4.3	19.8	22.5	17.2
Netherlands	2011	461	65.3	33.4	0.7	0.7	65.3	69.7	61.1
	2015	640	67.1	30.1	0.4	2.4	67.1	74.5	59.8
New Zealand	2011	814	64.8	33.0	0.3	1.9	64.8	69.6	60.1
	2015	896	66.1	30.5	0.8	2.5	66.1	71.8	61.0
Northern Ireland	2011	503	57.6	40.7	0.4	1.3	57.6	61.6	54.0
	2015	445	60.3	38.5	0.8	0.5	60.3	66.4	54.2
Oman	2011	1487	26.8	66.5	3.2	3.5	26.8	32.6	21.6
	2015	1307	38.8	57.7	1.7	1.8	38.8	46.5	31.1
Portugal	2011	580	74.9	22.1	1.3	1.7	74.9	76.7	73.1
	2015	670	76.9	21.1	0.0	2.0	76.9	81.7	71.3
Qatar	2011	596	29.3	67.0	1.4	2.2	29.3	32.9	26.4
	2015	740	33.8	60.4	1.8	4.0	33.8	37.5	29.9
Russian Federation	2011	644	67.4	30.1	0.8	1.7	67.4	72.3	62.5
	2015	710	73.7	25.3	0.2	0.8	73.7	74.6	72.8
Saudi Arabia	2011	658	39.5	55.7	2.6	2.2	39.5	46.2	32.6
	2015	601	35.7	58.2	2.3	3.8	35.7	48.9	23.7
Serbia	2011	624	65.3	32.5	0.5	1.7	65.3	62.8	67.2
	2015	566	67.8	28.9	1.1	2.2	67.8	75.6	61.1
Singapore	2011	915	78.9	20.6	0.4	0.1	78.9	80.3	77.7
	2015	931	57.3	42.0	0.2	0.5	57.3	61.4	53.5
Slovak Republic	2011	809	68.1	30.3	1.1	0.5	68.1	71.1	65.0
	2015	838	59.0	39.8	0.6	0.7	59.0	62.3	55.8
Slovenia	2011	644	59.7	38.4	0.8	1.1	59.7	62.7	57.0
	2015	635	73.3	24.7	0.5	1.6	73.3	79.0	67.2
Spain	2011	613	53.7	41.7	1.9	2.6	53.7	57.7	50.2
	2015	1101	67.9	29.8	0.4	1.9	67.9	68.1	67.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S06_l2 (S051095): Earth Science / Reasoning Type: CR 1 Point
Label: Air inside the balloon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT

Sweden	2011	676	64.4	33.5	1.0	1.1	64.4	72.1	56.5
	2015	587	68.6	28.2	0.9	2.3	68.6	77.1	59.5
Turkey	2011	1067	59.9	37.9	1.0	1.2	59.9	64.5	55.5
	2015	918	57.8	40.8	0.6	0.8	57.8	61.0	54.4
United Arab Emirates	2011	2087	37.8	57.5	2.0	2.8	37.8	43.6	32.3
	2015	3031	38.6	58.3	1.4	1.8	38.6	43.1	34.5
United States	2011	1762	59.2	38.4	0.5	1.9	59.2	61.6	56.7
	2015	1425	57.6	38.8	0.9	2.7	57.6	59.8	55.3

International Avg (n=40)	2011	30376	56.7	39.5	1.9	2.0	56.7	60.6	52.9
	2015	30627	58.4	38.4	0.8	2.3	58.4	63.1	53.8

Ontario, Canada	2011	648	61.8	33.3	1.4	3.4	61.8	64.0	59.8
	2015	658	60.2	34.7	1.5	3.6	60.2	64.7	56.3
Quebec, Canada	2011	616	60.2	37.5	0.9	1.5	60.2	65.0	55.1
	2015	398	68.4	30.7	0.0	0.9	68.4	70.6	66.4
Norway (4)	2011	436	50.5	45.8	0.6	3.1	50.5	60.4	39.5
	2015	599	58.3	36.7	0.9	4.1	58.3	64.0	52.6
Abu Dhabi, UAE	2011	592	34.8	59.8	2.2	3.2	34.8	43.1	27.0
	2015	716	30.3	67.0	0.7	2.1	30.3	31.9	29.0
Dubai, UAE	2011	865	43.1	53.4	1.3	2.2	43.1	48.2	39.1
	2015	1068	54.4	43.2	1.1	1.3	54.4	63.2	45.8
Florida, US	2011	376	61.3	34.8	1.0	2.9	61.3	69.3	53.5
	2015	289	60.4	37.0	0.8	1.7	60.4	64.2	56.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_01 (S041027): Life Science / Knowing Type: CR 1 Point
Label: Ecosystem and name of animal

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	94.4	4.4	1.0	0.1	94.4	96.8	92.3
	2015	868	97.0	1.9	0.9	0.2	97.0	97.5	96.6
Bahrain	2011	570	64.0	34.5	1.2	0.3	64.0	65.1	62.8
	2015	592	64.7	33.6	1.2	0.5	64.7	67.3	62.0
Belgium (Flemish)	2011	682	91.4	8.3	0.2	0.0	91.4	87.8	95.3
	2015	767	91.4	7.9	0.6	0.0	91.4	92.3	90.5
Chile	2011	791	85.9	12.4	1.3	0.5	85.9	86.9	84.7
	2015	678	85.1	11.7	2.3	0.9	85.1	84.1	86.0
Chinese Taipei	2011	609	94.5	5.2	0.3	0.0	94.5	93.6	95.2
	2015	616	94.4	5.4	0.2	0.0	94.4	94.9	94.0
Croatia	2011	650	96.1	3.9	0.0	0.0	96.1	95.0	97.3
	2015	563	95.6	4.4	0.0	0.0	95.6	95.6	95.6
Czech Republic	2011	646	96.8	3.1	0.1	0.0	96.8	96.8	96.8
	2015	747	96.2	3.4	0.3	0.0	96.2	96.2	96.2
Denmark	2011	562	90.6	8.1	1.3	0.0	90.6	90.9	90.2
	2015	528	92.0	6.1	1.4	0.5	92.0	94.3	90.0
England	2011	496	94.6	5.0	0.3	0.0	94.6	95.7	93.6
	2015	574	94.7	4.5	0.8	0.0	94.7	96.7	92.8
Finland	2011	667	95.1	4.1	0.8	0.0	95.1	95.9	94.3
	2015	718	94.5	5.1	0.4	0.0	94.5	95.7	93.3
Georgia	2011	684	84.2	13.2	2.2	0.4	84.2	86.5	82.1
	2015	563	83.6	11.8	2.5	2.1	83.6	85.0	82.3
Germany	2011	567	93.6	5.5	0.6	0.4	93.6	95.2	92.1
	2015	569	94.5	5.0	0.4	0.2	94.5	93.7	95.2
Hong Kong SAR	2011	563	96.4	3.3	0.2	0.0	96.4	95.0	97.5
	2015	513	96.2	3.8	0.0	0.0	96.2	96.6	95.9
Hungary	2011	752	95.2	3.7	0.6	0.5	95.2	95.5	94.9
	2015	713	95.8	3.4	0.4	0.4	95.8	94.9	96.6
Iran, Islamic Rep. of	2011	819	77.6	20.8	1.0	0.7	77.6	77.2	78.1
	2015	546	69.7	26.4	3.6	0.2	69.7	68.1	71.4
Ireland	2011	660	93.1	5.2	1.7	0.0	93.1	92.9	93.2
	2015	621	93.0	6.3	0.7	0.1	93.0	91.3	94.3
Italy	2011	598	86.5	13.0	0.3	0.1	86.5	84.7	88.6
	2015	612	90.5	9.1	0.0	0.3	90.5	90.6	90.5
Japan	2011	624	96.6	3.4	0.0	0.0	96.6	96.2	97.0
	2015	621	97.2	2.7	0.1	0.0	97.2	98.0	96.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_01 (S041027): Life Science / Knowing Type: CR 1 Point
Label: Ecosystem and name of animal

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	69.0	27.0	3.2	0.7	69.0	66.8	71.1
	2015	668	84.1	14.6	1.1	0.2	84.1	85.5	82.9
Korea, Rep. of	2011	614	86.9	13.0	0.1	0.0	86.9	87.9	85.8
	2015	666	92.4	7.6	0.0	0.0	92.4	92.7	92.0
Kuwait	2011	593	41.5	52.4	5.3	0.8	41.5	44.9	37.4
	2015	503	51.7	40.4	6.4	1.5	51.7	54.4	48.7
Lithuania	2011	657	96.2	3.4	0.4	0.0	96.2	93.5	98.4
	2015	655	96.1	3.3	0.6	0.1	96.1	95.9	96.2
Morocco	2011	1129	36.2	57.0	5.0	1.9	36.2	38.0	34.1
	2015	721	45.3	51.1	2.7	0.9	45.3	47.8	42.8
Netherlands	2011	459	94.3	5.3	0.4	0.0	94.3	93.5	95.2
	2015	634	94.6	5.1	0.2	0.1	94.6	93.5	95.6
New Zealand	2011	800	93.6	5.6	0.6	0.3	93.6	93.6	93.6
	2015	913	93.3	4.5	1.7	0.5	93.3	94.6	92.1
Northern Ireland	2011	499	92.6	6.9	0.3	0.2	92.6	93.9	91.4
	2015	444	94.3	5.4	0.4	0.0	94.3	91.1	97.6
Oman	2011	1481	59.4	38.9	1.1	0.5	59.4	62.5	56.8
	2015	1302	72.0	26.6	1.1	0.2	72.0	74.6	69.5
Portugal	2011	592	82.0	17.1	0.6	0.3	82.0	81.2	82.6
	2015	672	80.6	19.1	0.2	0.2	80.6	79.4	81.8
Qatar	2011	586	62.2	36.2	1.5	0.1	62.2	61.4	63.0
	2015	743	72.7	25.3	1.4	0.7	72.7	72.5	72.9
Russian Federation	2011	645	85.4	14.5	0.1	0.0	85.4	82.9	87.9
	2015	702	87.4	12.5	0.0	0.2	87.4	89.1	85.7
Saudi Arabia	2011	660	58.8	39.6	1.4	0.1	58.8	60.3	57.3
	2015	619	59.0	36.5	4.1	0.4	59.0	63.9	54.3
Serbia	2011	631	90.8	7.4	1.6	0.2	90.8	88.4	92.9
	2015	566	89.1	9.6	0.8	0.5	89.1	89.0	89.2
Singapore	2011	915	94.1	5.3	0.5	0.0	94.1	93.0	95.2
	2015	936	95.8	4.1	0.1	0.0	95.8	96.7	94.8
Slovak Republic	2011	814	91.5	8.0	0.3	0.2	91.5	92.4	90.8
	2015	831	91.6	7.6	0.7	0.0	91.6	88.1	95.0
Slovenia	2011	644	82.4	15.8	1.7	0.1	82.4	83.7	81.2
	2015	643	89.5	10.2	0.2	0.1	89.5	88.3	90.7
Spain	2011	602	88.4	8.4	2.9	0.2	88.4	88.0	88.9
	2015	1090	92.7	6.8	0.2	0.3	92.7	91.5	93.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_01 (S041027): Life Science / Knowing Type: CR 1 Point
Label: Ecosystem and name of animal

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	95.3	4.0	0.6	0.0	95.3	96.3	94.4
	2015	574	93.5	6.3	0.1	0.1	93.5	92.8	94.1
Turkey	2011	1070	65.5	33.8	0.6	0.1	65.5	63.8	67.1
	2015	924	71.5	27.7	0.8	0.0	71.5	68.9	74.0
United Arab Emirates	2011	2091	74.1	24.6	0.9	0.4	74.1	76.0	72.2
	2015	3032	74.1	24.2	1.6	0.0	74.1	74.5	73.7
United States	2011	1776	97.0	2.3	0.5	0.2	97.0	96.7	97.4
	2015	1434	96.7	2.0	1.1	0.2	96.7	96.9	96.5

International Avg (n=40)	2011	30340	84.1	14.6	1.1	0.2	84.1	84.2	84.0
	2015	30681	86.1	12.6	1.0	0.3	86.1	86.4	85.8

Ontario, Canada	2011	657	95.4	2.4	1.4	0.7	95.4	94.1	96.7
	2015	662	95.3	2.7	1.2	0.7	95.3	97.5	93.5
Quebec, Canada	2011	610	95.8	3.3	0.9	0.0	95.8	95.8	95.8
	2015	404	92.9	6.3	0.7	0.1	92.9	93.1	92.6
Norway (4)	2011	440	92.9	6.2	0.9	0.0	92.9	93.7	92.2
	2015	594	89.2	9.5	0.8	0.6	89.2	91.1	87.6
Abu Dhabi, UAE	2011	589	69.1	29.2	1.3	0.5	69.1	72.2	66.1
	2015	717	64.6	33.1	2.2	0.1	64.6	66.5	63.2
Dubai, UAE	2011	870	83.7	15.5	0.5	0.3	83.7	88.7	79.4
	2015	1063	87.9	10.8	1.3	0.0	87.9	88.6	87.2
Florida, US	2011	370	96.9	2.8	0.3	0.0	96.9	97.7	96.2
	2015	282	95.9	2.9	0.8	0.4	95.9	95.8	96.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_02 (S041043): Life Science / Knowing Type: CR 1 Point
Label: How to protect teeth from decay

COUNTRY	Year	N	10 %	11 %	12 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	11.0	35.9	3.7	4.4	36.9	7.8	0.3	55.1	61.1	49.7
	2015	868	13.7	39.4	2.8	2.8	36.4	4.6	0.2	58.7	60.9	56.7
Bahrain	2011	570	23.9	15.5	1.2	7.5	34.4	17.0	0.5	48.1	57.5	38.7
	2015	592	32.9	11.2	2.9	2.8	37.5	12.2	0.5	49.8	61.6	37.9
Belgium (Flemish)	2011	682	42.4	14.1	9.4	0.4	27.4	6.4	0.0	66.3	74.7	57.4
	2015	767	38.7	25.1	7.9	0.9	23.1	4.2	0.0	72.6	77.0	68.1
Chile	2011	791	28.9	14.2	6.4	2.2	37.4	9.7	1.2	51.7	56.2	46.8
	2015	678	33.4	15.9	3.9	2.0	35.3	8.0	1.6	55.1	61.3	48.8
Chinese Taipei	2011	609	23.7	40.4	13.5	0.4	15.1	6.8	0.0	78.1	86.2	71.2
	2015	616	21.8	44.1	11.9	0.0	18.2	4.0	0.0	77.8	77.8	77.8
Croatia	2011	650	33.4	5.3	24.2	0.7	29.7	6.8	0.0	63.5	68.8	58.3
	2015	563	34.8	13.0	21.2	0.4	26.2	4.4	0.0	69.4	78.1	59.9
Czech Republic	2011	646	39.1	26.8	6.1	0.2	18.0	9.8	0.0	72.1	76.9	68.1
	2015	747	46.1	21.8	3.7	0.9	17.2	10.3	0.0	72.5	76.0	68.4
Denmark	2011	562	29.0	23.9	6.5	2.3	29.7	8.1	0.5	61.7	61.6	61.8
	2015	528	35.6	21.8	2.2	3.6	29.4	6.6	1.0	63.1	66.7	59.8
England	2011	496	20.5	33.0	1.5	3.4	33.2	8.4	0.0	58.4	60.6	56.2
	2015	574	25.2	35.1	2.7	0.9	31.5	4.7	0.0	63.8	67.8	60.0
Finland	2011	667	38.3	36.3	3.2	2.2	13.4	6.6	0.0	80.0	88.0	72.8
	2015	718	42.7	32.3	2.8	2.4	15.6	4.1	0.0	80.2	86.8	74.0
Georgia	2011	684	22.5	8.3	6.5	6.2	32.0	23.7	0.9	43.4	47.9	39.2
	2015	563	17.9	11.2	4.1	15.4	33.6	14.8	3.0	48.6	51.7	45.8
Germany	2011	567	42.3	18.3	7.6	0.2	18.9	12.4	0.4	68.4	71.1	65.9
	2015	569	42.5	23.2	5.6	1.7	17.3	9.3	0.4	73.0	76.0	70.2
Hong Kong SAR	2011	563	21.7	27.4	18.6	5.2	24.5	2.7	0.0	72.9	73.6	72.3
	2015	513	35.3	20.3	14.0	2.3	25.3	2.8	0.0	71.9	73.3	70.8
Hungary	2011	752	43.7	17.0	5.1	1.2	24.3	8.0	0.7	66.9	68.8	64.8
	2015	713	46.4	21.3	4.3	1.7	19.3	6.6	0.4	73.8	77.5	70.2
Iran, Islamic Rep. of	2011	819	31.4	18.9	3.4	9.3	20.3	15.9	0.8	63.1	69.4	56.8
	2015	546	27.4	20.3	2.4	7.7	23.2	18.6	0.4	57.8	63.4	51.7
Ireland	2011	660	21.6	30.7	2.3	5.8	32.6	6.3	0.8	60.4	65.2	55.5
	2015	621	31.4	31.1	1.9	3.8	28.7	2.9	0.3	68.1	71.9	64.9
Italy	2011	598	33.1	21.8	5.2	1.2	27.2	11.1	0.4	61.3	63.7	58.6
	2015	610	27.1	32.6	7.5	0.4	21.5	10.7	0.3	67.5	66.5	68.3
Japan	2011	624	35.0	18.6	3.9	5.3	35.3	2.0	0.0	62.7	61.7	63.6
	2015	621	41.5	24.3	4.3	11.9	14.3	3.6	0.1	81.9	85.2	78.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_02 (S041043): Life Science / Knowing Type: CR 1 Point
Label: How to protect teeth from decay

COUNTRY	Year	N	10 %	11 %	12 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	22.6	18.0	6.9	14.8	22.2	14.3	1.3	62.2	61.8	62.7
	2015	668	36.3	23.5	4.6	5.6	22.8	7.0	0.3	69.9	77.5	63.0
Korea, Rep. of	2011	614	49.5	10.0	12.2	3.4	23.2	1.7	0.0	75.1	75.8	74.4
	2015	666	44.6	20.0	11.3	6.8	16.2	1.2	0.0	82.6	84.6	80.6
Kuwait	2011	591	16.2	10.5	2.6	3.4	22.4	43.7	1.2	32.7	42.7	20.5
	2015	503	11.9	8.1	2.1	6.5	23.1	46.4	1.8	28.6	34.2	22.6
Lithuania	2011	657	32.7	23.6	5.8	0.5	30.2	7.3	0.0	62.6	65.0	60.6
	2015	655	30.5	30.6	4.6	2.9	26.2	4.6	0.6	68.6	71.2	65.9
Morocco	2011	1129	6.7	5.1	0.8	0.6	30.0	54.4	2.3	13.2	15.1	11.2
	2015	721	13.6	15.7	3.9	1.0	36.1	28.4	1.2	34.3	38.1	30.4
Netherlands	2011	459	30.4	32.5	9.4	1.1	20.6	5.9	0.0	73.6	75.9	71.6
	2015	634	21.5	33.5	7.0	4.7	26.7	6.4	0.1	66.8	68.8	64.7
New Zealand	2011	800	12.7	30.1	3.4	0.3	45.7	7.6	0.3	46.5	47.2	45.7
	2015	913	13.3	33.5	1.6	1.1	42.7	6.8	1.0	49.5	52.2	47.1
Northern Ireland	2011	499	23.0	35.6	2.5	3.5	27.6	7.5	0.2	64.7	68.7	61.2
	2015	444	19.1	33.9	2.9	4.3	33.9	5.6	0.2	60.3	65.7	54.6
Oman	2011	1481	23.7	20.6	1.0	5.0	23.3	25.5	0.9	50.3	62.7	39.5
	2015	1301	28.9	11.4	0.5	5.3	38.8	14.7	0.3	46.2	51.2	41.2
Portugal	2011	592	37.2	20.7	5.5	1.3	29.8	5.3	0.3	64.7	67.6	62.3
	2015	672	33.6	23.4	9.2	2.0	26.7	4.8	0.3	68.2	73.2	62.7
Qatar	2011	586	20.9	12.8	2.4	2.4	40.5	20.9	0.1	38.5	44.0	33.2
	2015	743	24.1	13.6	1.7	4.7	36.6	18.5	0.8	44.2	48.2	40.2
Russian Federation	2011	645	29.8	29.5	12.8	7.9	12.6	7.5	0.0	80.0	80.0	80.0
	2015	702	31.9	27.3	10.1	11.5	12.8	6.2	0.2	80.8	83.4	78.3
Saudi Arabia	2011	660	19.1	5.5	3.7	34.7	21.4	15.4	0.1	63.1	74.5	51.1
	2015	619	16.1	22.7	1.3	9.1	21.6	28.5	0.7	49.2	64.7	34.2
Serbia	2011	631	28.3	15.2	24.4	6.5	17.7	7.7	0.2	74.4	82.2	67.8
	2015	566	39.6	25.7	12.0	5.3	9.9	7.0	0.5	82.6	87.5	77.6
Singapore	2011	915	28.8	35.8	5.0	4.0	24.1	2.3	0.0	73.6	78.4	69.0
	2015	936	31.4	43.3	4.2	2.9	16.5	1.6	0.1	81.8	84.1	79.4
Slovak Republic	2011	814	44.1	16.1	4.9	1.4	24.3	9.1	0.2	66.5	71.5	62.0
	2015	831	47.7	12.6	3.5	1.4	27.7	7.1	0.0	65.2	66.1	64.3
Slovenia	2011	644	25.9	11.1	21.0	8.1	26.3	7.5	0.1	66.1	71.6	60.7
	2015	643	38.0	11.6	15.9	11.4	17.5	5.4	0.2	76.9	81.8	71.8
Spain	2011	602	36.7	22.5	4.7	1.5	25.2	9.1	0.3	65.4	67.9	63.1
	2015	1090	49.5	21.5	4.3	1.2	19.3	3.8	0.3	76.6	79.7	73.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_02 (S041043): Life Science / Knowing Type: CR 1 Point
Label: How to protect teeth from decay

COUNTRY	Year	N	10 %	11 %	12 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	20.7	40.5	1.4	0.7	25.3	11.4	0.0	63.3	65.4	61.5
	2015	574	28.9	37.2	0.9	0.5	25.9	6.4	0.1	67.6	70.5	65.3
Turkey	2011	1070	36.9	13.2	7.0	6.7	30.6	5.4	0.1	63.9	71.2	57.0
	2015	923	39.4	20.0	7.9	12.8	14.8	4.9	0.1	80.1	85.9	74.7
United Arab Emirates	2011	2091	20.6	14.9	3.1	2.5	38.1	20.4	0.4	41.1	47.0	35.5
	2015	3032	20.5	18.1	2.4	4.2	36.2	18.5	0.1	45.2	53.3	38.1
United States	2011	1776	9.9	56.1	2.1	2.2	24.7	4.7	0.2	70.4	71.4	69.3
	2015	1434	9.7	53.3	2.7	5.4	24.8	3.7	0.3	71.1	71.8	70.4

International Avg (n=40)	2011	30338	28.0	22.2	6.8	4.3	26.9	11.6	0.4	61.1	65.5	56.9
	2015	30677	30.6	24.6	5.5	4.3	25.3	9.3	0.4	65.0	69.3	60.8

Ontario, Canada	2011	656	15.2	45.9	2.2	5.6	24.5	5.6	1.0	68.9	70.4	67.5
	2015	662	13.1	52.2	1.9	1.4	27.1	3.1	1.2	68.5	72.9	64.4
Quebec, Canada	2011	610	25.3	35.2	3.7	3.4	24.5	7.9	0.0	67.6	71.1	64.1
	2015	404	25.5	38.5	8.5	1.4	21.2	4.9	0.1	73.9	74.5	73.3
Norway (4)	2011	440	19.2	51.7	2.4	0.6	20.1	5.9	0.0	73.9	79.5	68.8
	2015	594	32.3	36.9	2.0	1.2	21.2	5.9	0.6	72.4	78.5	67.2
Abu Dhabi, UAE	2011	589	21.0	14.4	2.8	1.3	37.4	22.6	0.5	39.5	47.5	32.0
	2015	717	17.0	15.7	2.7	4.4	36.7	23.2	0.3	39.8	45.0	35.9
Dubai, UAE	2011	870	16.8	22.2	4.6	3.2	39.6	13.2	0.4	46.8	52.0	42.5
	2015	1063	26.1	22.3	3.0	5.0	34.0	9.5	0.1	56.3	63.3	49.3
Florida, US	2011	370	10.1	58.2	5.0	1.1	22.4	2.8	0.3	74.4	73.0	75.8
	2015	282	16.4	49.0	1.9	4.5	24.6	2.8	0.8	71.8	71.9	71.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_03 (S041050): Physical Science / Reasoning Type: MC Key: C
Label: Classifying item

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	48.0	35.6	7.2	48.0	6.8	2.1	0.3	52.7	43.7
	2015	868	50.8	30.4	5.5	50.8	9.8	3.2	0.3	52.0	49.7
Bahrain	2011	570	44.0	33.6	12.4	44.0	7.0	2.2	0.6	48.0	40.1
	2015	592	40.5	31.7	15.0	40.5	8.6	3.6	0.7	45.2	35.8
Belgium (Flemish)	2011	682	48.1	23.9	9.6	48.1	8.5	10.0	0.0	50.0	46.0
	2015	767	46.5	19.7	11.6	46.5	10.3	11.9	0.0	49.5	43.4
Chile	2011	791	45.5	31.5	6.8	45.5	12.5	1.8	1.8	41.9	49.7
	2015	678	47.7	28.2	7.4	47.7	13.1	1.5	2.0	48.1	47.4
Chinese Taipei	2011	609	68.7	15.0	6.5	68.7	7.6	2.2	0.1	72.0	65.8
	2015	616	67.6	13.2	6.7	67.6	10.6	1.9	0.0	66.8	68.3
Croatia	2011	650	62.7	17.8	6.1	62.7	7.9	5.5	0.0	65.7	59.8
	2015	563	54.7	23.2	5.3	54.7	9.5	7.0	0.2	55.1	54.3
Czech Republic	2011	646	54.8	13.8	10.8	54.8	14.9	5.7	0.0	52.0	57.0
	2015	747	55.1	10.3	11.2	55.1	18.2	5.2	0.0	57.7	52.0
Denmark	2011	562	41.6	33.0	6.5	41.6	9.1	9.3	0.5	44.2	38.7
	2015	528	43.7	31.6	9.3	43.7	6.9	7.3	1.3	41.6	45.6
England	2011	496	55.4	26.8	7.2	55.4	4.9	5.3	0.4	57.6	53.2
	2015	574	58.8	26.3	4.0	58.8	7.2	3.7	0.0	56.5	60.9
Finland	2011	667	57.0	21.0	7.3	57.0	7.2	7.5	0.0	56.4	57.6
	2015	718	52.1	24.8	7.1	52.1	8.1	7.8	0.1	53.3	50.9
Georgia	2011	684	17.0	56.1	7.8	17.0	12.4	5.7	1.0	18.6	15.4
	2015	563	19.3	49.5	5.6	19.3	18.4	3.8	3.4	13.6	24.6
Germany	2011	567	53.9	15.7	8.3	53.9	10.1	11.7	0.4	51.6	56.0
	2015	569	56.2	13.2	5.8	56.2	8.3	16.0	0.5	54.4	57.8
Hong Kong SAR	2011	563	61.4	20.6	7.1	61.4	10.6	0.4	0.0	58.7	63.4
	2015	513	60.1	23.5	7.8	60.1	8.3	0.3	0.0	56.3	63.3
Hungary	2011	752	44.4	28.8	5.5	44.4	6.3	14.2	0.9	46.3	42.4
	2015	713	40.1	25.9	6.9	40.1	6.3	20.1	0.7	43.4	36.9
Iran, Islamic Rep. of	2011	819	16.0	44.8	25.8	16.0	8.4	3.8	1.2	17.3	14.7
	2015	546	18.1	43.3	22.0	18.1	11.1	4.7	0.8	21.9	14.0
Ireland	2011	660	51.2	31.4	7.2	51.2	6.8	2.6	0.9	52.5	49.9
	2015	621	53.2	30.0	3.8	53.2	9.3	3.3	0.4	51.9	54.4
Italy	2011	598	72.1	11.6	5.1	72.1	5.1	5.7	0.5	70.5	73.7
	2015	613	71.2	10.4	5.7	71.2	5.4	6.9	0.5	70.4	71.8
Japan	2011	624	82.1	6.6	5.2	82.1	2.8	3.4	0.0	80.6	83.3
	2015	621	77.2	10.0	7.1	77.2	1.5	3.8	0.3	75.3	79.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_03 (S041050): Physical Science / Reasoning Type: MC Key: C
Label: Classifying item

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	58.6	18.3	10.2	58.6	10.0	1.5	1.3	56.2	60.9
	2015	668	65.4	16.9	7.5	65.4	8.8	1.1	0.4	66.6	64.2
Korea, Rep. of	2011	614	65.3	28.9	2.9	65.3	2.9	0.0	0.0	64.2	66.5
	2015	666	61.9	29.6	2.5	61.9	4.5	1.4	0.0	63.3	60.5
Kuwait	2011	589	27.0	29.4	23.8	27.0	9.4	9.2	1.1	27.3	26.6
	2015	503	29.6	32.8	18.3	29.6	8.3	8.0	3.0	29.3	30.0
Lithuania	2011	657	58.3	17.6	7.8	58.3	8.5	7.1	0.7	61.5	55.7
	2015	655	57.1	16.8	6.3	57.1	12.2	7.1	0.6	59.7	54.4
Morocco	2011	1057	25.6	23.6	27.9	25.6	16.2	2.8	3.9	25.6	25.7
	2015	720	25.8	25.8	27.7	25.8	14.0	4.6	2.1	22.2	29.3
Netherlands	2011	459	54.7	23.3	6.5	54.7	8.4	7.0	0.0	54.8	55.4
	2015	634	55.7	19.6	8.2	55.7	10.3	6.0	0.2	54.7	56.6
New Zealand	2011	800	48.7	34.8	4.7	48.7	8.9	2.6	0.4	54.1	43.2
	2015	913	47.7	32.2	6.2	47.7	9.2	3.5	1.1	50.0	45.7
Northern Ireland	2011	499	57.0	25.5	7.3	57.0	8.2	1.8	0.2	56.6	57.4
	2015	442	55.4	25.5	5.0	55.4	10.1	4.0	0.0	58.5	52.2
Oman	2011	1481	39.2	29.0	16.9	39.2	11.3	2.4	1.2	40.7	37.9
	2015	1295	43.5	29.8	13.5	43.5	10.6	2.4	0.2	45.9	41.3
Portugal	2011	592	69.0	15.5	2.6	69.0	9.3	3.3	0.3	71.9	66.7
	2015	672	65.7	17.9	4.1	65.7	7.9	4.1	0.3	66.4	64.9
Qatar	2011	586	35.8	36.2	15.5	35.8	10.2	2.2	0.2	37.3	34.3
	2015	743	41.2	31.4	10.3	41.2	11.8	4.2	1.1	40.7	41.6
Russian Federation	2011	645	52.4	29.9	4.8	52.4	6.8	5.9	0.1	51.4	53.3
	2015	702	59.1	26.4	3.2	59.1	4.9	5.5	0.8	59.2	59.1
Saudi Arabia	2011	661	31.0	38.6	16.7	31.0	13.0	0.6	0.1	30.0	32.1
	2015	620	33.7	32.4	19.8	33.7	10.6	2.6	1.0	38.3	29.3
Serbia	2011	631	55.9	20.6	3.4	55.9	5.3	14.0	0.8	57.5	54.6
	2015	566	55.2	24.8	5.9	55.2	5.7	7.9	0.5	57.9	52.4
Singapore	2011	915	51.2	41.4	4.0	51.2	3.0	0.4	0.0	48.3	54.0
	2015	936	55.7	38.4	2.7	55.7	3.0	0.0	0.1	55.3	56.1
Slovak Republic	2011	814	59.2	25.9	3.8	59.2	8.2	2.8	0.2	58.9	59.5
	2015	831	53.0	27.2	4.7	53.0	10.0	4.6	0.4	54.5	51.6
Slovenia	2011	638	61.9	22.7	6.9	61.9	5.3	3.2	0.1	62.3	61.4
	2015	643	55.3	27.2	6.2	55.3	6.6	4.5	0.3	58.1	52.4
Spain	2011	602	56.8	24.7	8.0	56.8	3.8	6.4	0.3	57.3	56.3
	2015	1090	59.1	24.7	6.4	59.1	3.6	5.8	0.4	63.5	55.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_03 (S041050): Physical Science / Reasoning Type: MC Key: C
Label: Classifying item

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	50.7	26.0	8.5	50.7	9.4	5.0	0.3	49.6	51.6
	2015	574	46.1	27.8	8.0	46.1	8.1	9.8	0.2	51.7	40.7
Turkey	2011	1070	63.2	22.4	7.1	63.2	6.5	0.6	0.3	66.2	60.4
	2015	924	59.6	28.3	4.4	59.6	6.5	0.8	0.4	62.6	56.9
United Arab Emirates	2011	2091	36.8	35.9	12.0	36.8	11.7	2.8	0.8	36.3	37.3
	2015	3032	40.2	34.5	11.8	40.2	10.5	2.7	0.2	39.4	41.0
United States	2011	1776	52.1	30.0	6.0	52.1	9.5	1.9	0.4	50.0	54.4
	2015	1434	50.0	29.6	7.1	50.0	10.3	2.4	0.5	49.0	51.1

International Avg (n=40)	2011	30260	50.9	26.7	9.0	50.9	8.4	4.6	0.5	51.4	50.4
	2015	30673	50.7	26.1	8.4	50.7	9.0	5.1	0.6	51.5	49.9

Ontario, Canada	2011	657	50.8	29.0	5.2	50.8	11.3	2.4	1.3	51.1	50.5
	2015	653	55.5	29.1	6.2	55.5	6.4	1.4	1.3	56.2	54.7
Quebec, Canada	2011	610	63.3	20.0	8.2	63.3	4.4	4.1	0.0	62.1	64.4
	2015	384	61.7	23.6	7.6	61.7	6.2	0.8	0.1	62.9	60.2
Norway (4)	2011	440	52.6	18.8	6.9	52.6	9.6	11.9	0.2	51.1	54.0
	2015	594	46.1	23.6	6.3	46.1	8.1	15.0	0.8	45.4	46.7
Abu Dhabi, UAE	2011	589	35.1	34.6	13.0	35.1	13.4	2.8	1.1	32.7	37.3
	2015	717	33.8	36.4	13.7	33.8	12.9	2.8	0.5	36.6	31.8
Dubai, UAE	2011	870	45.6	35.8	8.0	45.6	8.0	2.2	0.4	47.2	44.2
	2015	1063	47.9	36.3	6.8	47.9	7.0	1.8	0.2	48.5	47.3
Florida, US	2011	370	48.8	31.2	5.0	48.8	13.3	1.2	0.5	49.6	48.1
	2015	282	45.2	34.2	7.0	45.2	11.1	1.7	0.8	50.8	39.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S07_04 (S041070): Physical Science / Applying Type: MC Key: A
Label: Why shadow forms

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	61.9	61.9	10.1	17.0	9.0	1.6	0.4	61.1	62.6
	2015	868	62.1	62.1	10.3	15.9	8.9	1.9	0.8	56.9	66.7
Bahrain	2011	570	26.4	26.4	24.5	16.4	29.6	2.5	0.6	23.9	28.8
	2015	592	25.9	25.9	29.3	10.4	29.9	2.7	1.8	24.6	27.3
Belgium (Flemish)	2011	682	39.6	39.6	11.9	20.9	26.6	0.7	0.3	32.5	47.0
	2015	767	45.1	45.1	11.9	19.5	22.3	1.2	0.0	39.8	50.6
Chile	2011	791	56.3	56.3	8.7	19.4	11.5	2.0	2.2	56.8	55.7
	2015	678	64.0	64.0	13.6	11.3	6.8	2.1	2.3	63.6	64.5
Chinese Taipei	2011	609	61.2	61.2	15.1	3.0	20.4	0.2	0.1	53.1	68.2
	2015	616	68.6	68.6	18.8	4.9	7.3	0.4	0.0	65.0	72.1
Croatia	2011	650	32.4	32.4	11.4	29.0	26.4	0.9	0.0	27.0	37.6
	2015	563	34.4	34.4	10.6	28.5	24.5	1.8	0.2	27.4	42.0
Czech Republic	2011	646	57.3	57.3	10.9	4.8	25.2	1.7	0.0	50.8	62.8
	2015	747	56.6	56.6	11.1	3.8	26.5	1.5	0.6	52.8	61.2
Denmark	2011	562	53.8	53.8	12.0	5.9	24.6	3.2	0.6	50.2	57.8
	2015	528	52.6	52.6	8.0	12.5	23.0	2.2	1.6	47.4	57.1
England	2011	496	68.3	68.3	9.2	12.9	7.2	1.8	0.7	68.6	67.9
	2015	574	70.5	70.5	10.4	10.0	8.1	0.9	0.1	67.8	73.1
Finland	2011	667	50.9	50.9	13.6	9.8	24.7	1.0	0.0	41.9	59.2
	2015	718	51.7	51.7	12.9	10.3	23.4	1.6	0.1	48.8	54.5
Georgia	2011	684	30.9	30.9	26.3	26.9	11.7	2.9	1.3	26.9	34.8
	2015	563	29.2	29.2	24.3	26.8	13.5	1.8	4.4	24.0	34.0
Germany	2011	567	71.9	71.9	8.4	3.6	13.9	1.8	0.4	62.4	80.5
	2015	569	60.9	60.9	10.6	7.4	17.8	2.6	0.7	59.2	62.5
Hong Kong SAR	2011	563	49.7	49.7	12.1	3.2	34.7	0.3	0.0	44.8	53.4
	2015	513	56.4	56.4	8.3	5.3	30.0	0.0	0.0	52.2	59.9
Hungary	2011	752	62.2	62.2	12.5	12.0	10.8	1.6	1.0	58.7	66.0
	2015	713	66.8	66.8	12.0	10.4	8.4	1.1	1.3	61.6	71.7
Iran, Islamic Rep. of	2011	819	49.2	49.2	25.6	5.3	14.8	3.7	1.4	43.0	55.4
	2015	546	47.8	47.8	19.3	10.2	18.6	3.1	0.9	47.5	48.1
Ireland	2011	660	60.1	60.1	15.2	15.0	7.9	0.9	0.9	59.5	60.7
	2015	621	64.3	64.3	10.1	15.6	8.4	1.0	0.6	59.2	68.6
Italy	2011	598	42.9	42.9	18.7	11.6	24.4	1.9	0.5	39.6	46.6
	2015	613	45.2	45.2	18.4	13.3	20.1	2.5	0.5	40.8	49.1
Japan	2011	624	84.9	84.9	7.5	4.6	2.9	0.2	0.0	81.3	87.9
	2015	621	78.2	78.2	10.2	6.3	4.8	0.2	0.3	75.5	80.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_04 (S041070): Physical Science / Applying Type: MC Key: A
Label: Why shadow forms

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	58.5	58.5	10.3	8.7	19.4	1.6	1.5	52.8	63.8
	2015	668	62.0	62.0	12.2	9.1	14.7	1.3	0.7	59.2	64.7
Korea, Rep. of	2011	614	65.6	65.6	21.5	5.7	7.3	0.0	0.0	58.7	72.5
	2015	666	78.2	78.2	15.1	1.6	4.9	0.2	0.0	74.2	82.2
Kuwait	2011	585	22.9	22.9	27.9	13.3	25.3	9.2	1.4	23.6	22.0
	2015	503	30.5	30.5	24.3	13.0	19.5	9.4	3.4	26.7	34.5
Lithuania	2011	657	63.9	63.9	8.7	11.8	13.6	1.0	1.0	58.4	68.3
	2015	655	67.3	67.3	6.8	10.9	13.6	0.8	0.6	65.8	68.8
Morocco	2011	1082	24.6	24.6	20.5	22.4	24.6	3.4	4.5	23.5	25.8
	2015	721	34.0	34.0	16.1	18.8	23.6	4.8	2.7	37.1	30.8
Netherlands	2011	459	66.1	66.1	5.2	10.4	17.7	0.6	0.0	59.8	74.4
	2015	634	64.3	64.3	6.2	10.0	18.1	1.0	0.4	56.0	72.5
New Zealand	2011	800	57.8	57.8	9.9	17.4	12.6	1.9	0.5	56.3	59.3
	2015	913	61.4	61.4	10.5	13.9	10.5	2.1	1.6	60.0	62.6
Northern Ireland	2011	499	57.9	57.9	12.8	16.2	11.9	0.9	0.2	55.5	60.0
	2015	440	64.5	64.5	10.4	16.9	8.2	0.0	0.0	60.7	68.6
Oman	2011	1481	29.1	29.1	22.0	20.6	22.9	3.8	1.6	28.7	29.4
	2015	1299	27.8	27.8	20.6	19.0	29.1	3.1	0.4	28.4	27.2
Portugal	2011	592	53.9	53.9	19.9	10.4	13.7	1.3	0.7	53.6	54.1
	2015	672	49.8	49.8	23.0	10.3	15.2	1.3	0.4	43.4	56.7
Qatar	2011	586	37.0	37.0	22.2	17.5	20.9	2.3	0.2	35.0	38.9
	2015	743	34.6	34.6	24.1	13.1	22.9	3.9	1.5	30.9	38.1
Russian Federation	2011	645	68.9	68.9	5.4	8.9	15.0	1.6	0.1	65.0	72.9
	2015	702	67.0	67.0	4.0	13.0	14.2	0.6	1.1	67.3	66.7
Saudi Arabia	2011	661	20.6	20.6	32.4	14.1	31.2	1.4	0.3	16.9	24.5
	2015	620	19.9	19.9	25.3	19.9	28.0	5.4	1.5	16.1	23.5
Serbia	2011	631	43.9	43.9	17.7	21.3	13.5	2.5	1.1	35.6	50.9
	2015	566	46.1	46.1	17.1	16.1	18.2	2.0	0.5	38.6	53.8
Singapore	2011	915	85.5	85.5	9.2	2.5	2.5	0.2	0.1	84.8	86.2
	2015	936	89.3	89.3	7.1	1.6	1.9	0.0	0.1	89.6	88.9
Slovak Republic	2011	814	51.8	51.8	17.2	17.3	12.2	1.3	0.2	44.6	58.2
	2015	831	59.3	59.3	12.7	15.6	10.5	1.5	0.4	54.6	63.8
Slovenia	2011	643	38.2	38.2	45.8	7.1	5.5	3.0	0.3	32.4	44.0
	2015	643	51.5	51.5	34.9	6.0	5.4	1.9	0.4	42.8	60.6
Spain	2011	602	42.9	42.9	26.6	7.5	18.6	3.6	0.8	37.9	47.7
	2015	1090	52.6	52.6	20.0	8.5	16.6	1.3	1.0	47.3	57.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_04 (S041070): Physical Science / Applying Type: MC Key: A
Label: Why shadow forms

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	59.8	59.8	6.7	10.7	19.0	3.1	0.6	56.9	62.4
	2015	574	57.2	57.2	8.7	10.7	19.1	3.3	1.0	52.6	62.3
Turkey	2011	1070	48.1	48.1	25.5	9.7	14.3	2.0	0.4	46.7	49.5
	2015	924	47.1	47.1	24.7	11.5	14.8	1.4	0.5	42.5	51.6
United Arab Emirates	2011	2091	34.7	34.7	22.1	14.2	25.6	2.6	0.9	29.7	39.4
	2015	3032	44.2	44.2	19.3	12.1	21.7	2.5	0.2	43.3	45.1
United States	2011	1776	64.7	64.7	8.6	13.1	10.6	2.5	0.5	60.3	69.5
	2015	1434	65.7	65.7	9.5	12.7	9.0	2.2	1.0	62.8	68.7

International Avg (n=40)	2011	30286	51.4	51.4	16.3	12.6	17.1	2.0	0.7	47.5	55.2
	2015	30676	53.9	53.9	15.1	12.2	16.0	2.0	0.9	50.4	57.3

Ontario, Canada	2011	657	59.9	59.9	13.5	8.0	15.2	1.3	2.1	50.0	69.4
	2015	662	61.6	61.6	11.2	11.8	11.8	1.4	2.2	58.4	65.0
Quebec, Canada	2011	610	45.0	45.0	8.8	16.9	27.4	1.9	0.1	35.0	54.9
	2015	404	49.8	49.8	11.1	15.3	21.7	2.1	0.1	46.4	53.4
Norway (4)	2011	440	43.1	43.1	13.6	16.1	22.7	4.2	0.3	38.6	47.3
	2015	594	45.8	45.8	11.9	17.3	21.1	1.6	2.3	41.5	49.6
Abu Dhabi, UAE	2011	589	30.3	30.3	26.3	13.6	26.4	2.4	1.2	27.1	33.2
	2015	717	34.1	34.1	22.8	13.7	26.3	2.6	0.5	31.9	35.8
Dubai, UAE	2011	870	49.2	49.2	16.0	13.8	18.1	2.5	0.4	41.9	55.3
	2015	1063	58.5	58.5	16.7	9.3	13.4	1.9	0.2	59.3	57.6
Florida, US	2011	370	67.8	67.8	11.7	9.1	9.6	1.0	0.8	62.1	73.3
	2015	282	59.3	59.3	9.6	19.4	9.5	1.4	0.8	53.2	65.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S07_05 (S041006): Life Science / Applying Type: CR 2 Points
Label: A tree and lion are living

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	19.6	37.7	37.0	5.3	0.4	57.3	19.6	18.7	20.4
	2015	868	21.8	42.8	30.2	4.3	0.8	64.6	21.8	24.1	19.8
Bahrain	2011	570	25.9	17.1	46.5	9.7	0.8	43.0	25.9	30.1	21.8
	2015	592	19.4	29.1	39.4	10.3	1.8	48.5	19.4	23.9	14.9
Belgium (Flemish)	2011	682	8.0	27.4	58.8	5.4	0.3	35.4	8.0	7.5	8.5
	2015	767	11.6	36.3	44.0	8.1	0.0	48.0	11.6	11.8	11.5
Chile	2011	791	20.6	35.4	34.6	7.0	2.3	56.1	20.6	21.0	20.3
	2015	678	16.9	37.9	35.5	7.2	2.6	54.7	16.9	18.3	15.3
Chinese Taipei	2011	609	32.7	35.6	25.0	6.7	0.1	68.3	32.7	32.6	32.8
	2015	616	20.7	38.1	31.7	9.5	0.0	58.8	20.7	21.5	20.0
Croatia	2011	650	36.4	42.9	14.1	6.6	0.0	79.4	36.4	37.5	35.4
	2015	563	43.7	35.5	14.6	6.0	0.2	79.2	43.7	46.6	40.5
Czech Republic	2011	646	33.7	35.2	18.6	12.1	0.5	68.9	33.7	33.0	34.3
	2015	747	30.2	36.1	21.1	11.9	0.7	66.3	30.2	31.8	28.3
Denmark	2011	561	17.3	38.4	35.2	8.4	0.6	55.7	17.3	15.7	19.2
	2015	528	10.7	32.9	45.3	9.4	1.6	43.7	10.7	7.2	13.9
England	2011	496	19.1	46.7	26.6	6.9	0.7	65.8	19.1	17.2	20.9
	2015	574	23.6	45.3	26.6	4.4	0.1	68.9	23.6	22.3	24.8
Finland	2011	667	20.5	42.2	27.4	9.9	0.0	62.7	20.5	21.8	19.3
	2015	718	12.8	46.7	33.9	6.6	0.1	59.5	12.8	12.8	12.7
Georgia	2011	684	25.4	25.5	32.3	14.9	1.8	50.9	25.4	26.2	24.7
	2015	563	23.8	26.2	35.0	10.6	4.4	50.0	23.8	24.0	23.6
Germany	2011	567	10.0	31.1	42.3	16.2	0.4	41.1	10.0	7.8	12.0
	2015	569	10.8	29.6	44.0	14.5	1.2	40.3	10.8	9.7	11.7
Hong Kong SAR	2011	563	24.9	42.6	25.1	7.5	0.0	67.5	24.9	28.1	22.4
	2015	513	32.0	35.6	28.1	4.3	0.0	67.6	32.0	25.9	37.1
Hungary	2011	752	24.0	38.6	29.1	7.2	1.1	62.6	24.0	26.2	21.7
	2015	713	22.2	35.6	34.6	6.3	1.3	57.8	22.2	25.4	19.1
Iran, Islamic Rep. of	2011	818	30.5	31.4	23.5	12.9	1.7	61.9	30.5	33.4	27.6
	2015	546	21.9	23.1	34.2	19.8	1.0	45.0	21.9	22.9	20.8
Ireland	2011	660	19.5	36.4	35.7	7.4	0.9	55.9	19.5	19.6	19.4
	2015	621	16.7	43.5	35.3	3.9	0.6	60.2	16.7	19.5	14.4
Italy	2011	598	29.6	36.1	27.5	6.2	0.5	65.7	29.6	28.7	30.5
	2015	612	28.2	36.0	29.0	5.8	1.0	64.2	28.2	27.3	29.1
Japan	2011	624	13.8	34.7	47.6	3.9	0.0	48.5	13.8	11.8	15.5
	2015	621	17.9	40.3	36.1	5.4	0.3	58.2	17.9	15.2	20.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_05 (S041006): Life Science / Applying Type: CR 2 Points
Label: A tree and lion are living

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	10.9	22.1	58.1	7.4	1.5	33.0	10.9	11.4	10.5
	2015	668	19.7	39.4	37.6	2.5	0.7	59.2	19.7	23.6	16.3
Korea, Rep. of	2011	614	11.5	43.9	42.2	2.3	0.0	55.4	11.5	13.2	9.7
	2015	666	17.4	48.4	33.0	1.1	0.0	65.8	17.4	14.2	20.7
Kuwait	2011	592	7.7	17.4	42.1	30.6	2.1	25.1	7.7	10.0	4.9
	2015	503	10.9	16.7	35.6	33.3	3.6	27.6	10.9	12.8	8.9
Lithuania	2011	657	14.3	32.8	41.1	10.9	1.0	47.1	14.3	16.5	12.5
	2015	655	15.8	32.4	41.6	9.5	0.6	48.3	15.8	17.4	14.3
Morocco	2011	1128	3.7	7.5	44.5	39.2	5.1	11.2	3.7	5.0	2.3
	2015	721	14.4	10.0	51.3	21.1	3.1	24.4	14.4	17.2	11.7
Netherlands	2011	459	12.2	33.3	51.0	3.6	0.0	45.5	12.2	11.1	13.7
	2015	634	8.9	36.0	50.2	4.3	0.7	44.9	8.9	8.4	9.4
New Zealand	2011	800	14.6	37.6	41.3	5.7	0.7	52.3	14.6	16.8	12.4
	2015	913	16.2	38.0	39.8	4.3	1.7	54.2	16.2	15.5	16.8
Northern Ireland	2011	499	13.6	46.1	33.7	6.3	0.2	59.7	13.6	13.8	13.4
	2015	444	17.7	39.8	39.0	3.3	0.2	57.5	17.7	14.4	21.2
Oman	2011	1481	16.7	13.4	53.7	14.4	1.8	30.1	16.7	18.0	15.6
	2015	1302	25.2	21.7	42.3	10.4	0.5	46.8	25.2	29.3	21.1
Portugal	2011	592	22.4	30.1	39.1	7.6	0.7	52.6	22.4	29.0	17.1
	2015	672	19.3	34.6	36.3	9.0	0.8	53.9	19.3	21.0	17.5
Qatar	2011	586	9.6	23.5	52.9	13.7	0.4	33.1	9.6	9.9	9.4
	2015	743	16.0	25.9	44.0	12.6	1.6	41.9	16.0	15.3	16.7
Russian Federation	2011	645	27.0	35.2	31.9	5.4	0.5	62.2	27.0	28.1	25.9
	2015	702	36.8	30.9	23.7	7.4	1.1	67.7	36.8	42.5	31.2
Saudi Arabia	2011	661	23.5	23.0	40.9	12.4	0.3	46.5	23.5	29.3	17.4
	2015	620	10.9	21.7	39.3	26.4	1.7	32.6	10.9	14.8	7.1
Serbia	2011	631	41.8	31.5	16.3	9.2	1.2	73.3	41.8	41.2	42.2
	2015	566	42.6	28.3	16.6	11.8	0.6	71.0	42.6	43.9	41.3
Singapore	2011	915	73.5	15.7	10.0	0.7	0.1	89.1	73.5	75.1	71.9
	2015	936	78.7	13.5	6.9	0.7	0.1	92.2	78.7	80.9	76.6
Slovak Republic	2011	814	31.6	36.6	23.0	8.6	0.2	68.2	31.6	33.7	29.8
	2015	831	31.2	32.3	25.3	10.8	0.4	63.5	31.2	32.7	29.7
Slovenia	2011	644	27.3	30.0	31.9	10.5	0.3	57.3	27.3	28.8	25.8
	2015	643	23.8	39.5	26.9	9.3	0.5	63.3	23.8	23.8	23.7
Spain	2011	602	15.1	30.1	42.4	11.3	1.1	45.2	15.1	17.5	12.8
	2015	1090	18.1	33.0	38.4	9.4	1.0	51.1	18.1	18.0	18.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_05 (S041006): Life Science / Applying Type: CR 2 Points
Label: A tree and lion are living

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	15.2	38.4	34.7	11.0	0.7	53.6	15.2	14.4	15.8
	2015	574	16.4	46.2	27.1	9.2	1.1	62.6	16.4	16.2	16.6
Turkey	2011	1070	21.5	31.2	41.7	5.1	0.5	52.7	21.5	24.0	19.1
	2015	924	19.4	32.2	43.4	4.4	0.5	51.6	19.4	20.3	18.6
United Arab Emirates	2011	2091	16.4	25.2	45.0	12.5	0.9	41.6	16.4	16.0	16.8
	2015	3031	21.6	27.2	38.2	12.7	0.3	48.8	21.6	23.2	20.2
United States	2011	1776	19.8	33.1	44.0	2.4	0.6	52.9	19.8	19.0	20.8
	2015	1434	18.5	50.6	28.3	1.6	1.0	69.1	18.5	19.3	17.7

International Avg (n=40)	2011	30338	21.5	31.8	36.2	9.6	0.8	53.4	21.5	22.5	20.7
	2015	30681	22.1	33.7	34.1	9.1	1.0	55.8	22.1	22.9	21.3

Ontario, Canada	2011	657	23.0	39.6	32.0	3.0	2.3	62.6	23.0	22.1	23.9
	2015	662	19.2	47.7	25.9	4.8	2.4	66.9	19.2	21.3	17.1
Quebec, Canada	2011	610	12.7	41.4	40.2	5.6	0.1	54.1	12.7	12.3	13.1
	2015	404	18.2	38.8	36.2	6.7	0.1	57.0	18.2	18.8	17.7
Norway (4)	2011	440	15.6	36.1	32.8	14.8	0.6	51.7	15.6	17.4	14.0
	2015	594	13.2	31.6	42.5	10.4	2.3	44.8	13.2	12.8	13.6
Abu Dhabi, UAE	2011	589	16.9	20.7	49.2	12.1	1.2	37.6	16.9	17.6	16.2
	2015	717	13.9	25.4	46.1	14.0	0.5	39.3	13.9	15.1	13.1
Dubai, UAE	2011	870	18.7	30.2	41.2	9.4	0.4	48.9	18.7	17.1	20.1
	2015	1063	33.0	32.7	28.5	5.6	0.2	65.7	33.0	36.3	29.6
Florida, US	2011	370	26.8	36.5	33.0	2.9	0.8	63.3	26.8	30.1	23.7
	2015	282	27.7	48.1	22.3	1.1	0.8	75.8	27.7	27.5	27.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_06 (S041052): Physical Science / Knowing Type: MC Key: B
Label: Which one is a solid

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	77.2	9.3	77.2	4.8	6.2	1.8	0.8	74.2	79.8
	2015	868	83.5	6.0	83.5	4.5	4.0	1.1	0.9	80.4	86.2
Bahrain	2011	570	77.2	8.6	77.2	4.7	7.2	1.1	1.2	80.8	73.6
	2015	592	78.3	8.0	78.3	3.7	5.2	2.7	2.1	87.2	69.4
Belgium (Flemish)	2011	682	28.0	27.4	28.0	30.0	10.0	4.1	0.3	22.3	34.1
	2015	767	32.4	25.5	32.4	25.6	9.9	6.2	0.3	28.1	36.9
Chile	2011	791	61.0	13.7	61.0	8.8	11.4	2.5	2.6	60.9	61.1
	2015	678	71.7	10.0	71.7	5.5	8.4	1.2	3.3	68.0	75.4
Chinese Taipei	2011	609	85.5	6.1	85.5	5.3	1.7	1.4	0.1	87.9	83.5
	2015	616	89.4	4.5	89.4	3.9	2.1	0.0	0.0	87.9	90.9
Croatia	2011	650	85.4	8.1	85.4	3.3	2.4	0.6	0.3	89.1	81.8
	2015	563	85.4	6.9	85.4	5.1	1.5	0.8	0.2	85.3	85.6
Czech Republic	2011	646	77.6	8.8	77.6	5.8	5.6	1.7	0.5	69.9	84.1
	2015	747	76.9	8.9	76.9	6.8	5.1	1.1	1.1	74.9	79.3
Denmark	2011	562	53.8	15.5	53.8	8.8	15.6	5.4	1.0	50.9	57.2
	2015	528	55.9	13.7	55.9	10.2	14.2	3.6	2.4	54.9	56.9
England	2011	496	86.2	4.2	86.2	4.0	2.8	2.0	0.7	88.0	84.5
	2015	574	88.4	4.8	88.4	3.3	1.9	1.4	0.1	86.1	90.5
Finland	2011	667	73.5	9.0	73.5	5.8	8.2	3.4	0.2	75.7	71.5
	2015	718	71.7	11.2	71.7	8.8	5.4	2.7	0.2	75.4	68.2
Georgia	2011	684	69.8	11.8	69.8	8.0	7.4	0.8	2.3	69.3	70.2
	2015	563	75.4	6.4	75.4	5.7	5.9	1.3	5.2	75.3	75.5
Germany	2011	567	82.6	4.5	82.6	5.3	4.1	2.9	0.6	81.7	83.4
	2015	569	78.2	6.6	78.2	5.9	5.0	3.0	1.2	79.8	76.8
Hong Kong SAR	2011	563	91.8	3.4	91.8	2.3	2.2	0.3	0.0	90.4	92.9
	2015	513	95.5	2.5	95.5	0.7	1.2	0.2	0.0	94.9	96.0
Hungary	2011	752	79.2	7.1	79.2	4.0	6.1	2.5	1.2	78.3	80.1
	2015	713	82.0	4.1	82.0	2.6	6.1	3.4	1.7	83.2	80.9
Iran, Islamic Rep. of	2011	818	72.7	11.7	72.7	6.5	4.2	2.6	2.2	74.6	70.9
	2015	546	66.0	13.0	66.0	9.3	9.7	1.1	1.0	67.2	64.6
Ireland	2011	660	74.2	12.3	74.2	5.8	5.1	1.7	0.9	73.7	74.6
	2015	621	75.7	10.3	75.7	4.6	8.1	0.7	0.6	69.4	81.0
Italy	2011	598	77.9	6.0	77.9	4.9	8.2	2.4	0.5	79.7	76.0
	2015	613	89.3	4.4	89.3	1.6	2.3	1.4	1.0	89.4	89.2
Japan	2011	624	85.9	5.3	85.9	2.6	5.3	0.7	0.1	87.9	84.2
	2015	621	89.3	5.6	89.3	1.7	2.0	1.0	0.3	91.5	87.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_06 (S041052): Physical Science / Knowing Type: MC Key: B
Label: Which one is a solid

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	86.0	5.5	86.0	3.6	1.9	1.5	1.5	87.4	84.7
	2015	668	90.1	4.3	90.1	2.0	2.3	0.6	0.7	89.9	90.4
Korea, Rep. of	2011	614	91.2	3.8	91.2	2.9	1.7	0.4	0.0	90.7	91.7
	2015	666	96.1	2.9	96.1	0.6	0.3	0.1	0.0	96.2	96.1
Kuwait	2011	586	64.1	13.2	64.1	7.2	7.5	5.8	2.3	67.6	59.8
	2015	503	58.5	12.9	58.5	8.0	8.4	7.9	4.3	63.5	53.2
Lithuania	2011	657	89.4	4.1	89.4	1.4	2.6	1.6	1.0	91.1	88.0
	2015	564	92.3	2.4	92.3	1.3	2.9	0.5	0.5	89.3	95.3
Morocco	2011	1066	47.3	17.8	47.3	11.0	15.4	2.1	6.4	50.5	43.7
	2015	721	51.5	18.7	51.5	9.4	13.9	3.0	3.5	56.2	46.9
Netherlands	2011	459	37.0	20.8	37.0	26.8	13.2	2.2	0.0	34.7	39.8
	2015	634	34.1	24.0	34.1	25.2	13.7	2.2	0.8	34.6	33.6
New Zealand	2011	800	71.8	9.7	71.8	4.2	11.5	1.7	1.1	71.0	72.6
	2015	913	71.4	11.3	71.4	5.4	7.9	1.9	2.1	70.4	72.2
Northern Ireland	2011	499	77.5	6.4	77.5	7.2	7.6	1.0	0.2	81.2	74.4
	2015	438	74.1	10.4	74.1	5.7	9.0	0.8	0.0	72.0	76.3
Oman	2011	1481	62.9	15.4	62.9	6.9	10.8	1.8	2.2	68.6	57.9
	2015	1302	69.2	14.2	69.2	7.3	6.4	2.1	0.8	70.5	68.0
Portugal	2011	592	77.0	6.2	77.0	7.2	7.9	0.9	0.8	79.9	74.7
	2015	672	78.9	5.5	78.9	5.4	7.9	1.4	0.8	75.9	82.2
Qatar	2011	586	62.0	17.8	62.0	8.5	8.8	2.1	0.8	68.5	55.5
	2015	743	72.5	11.4	72.5	6.2	5.0	2.7	2.2	72.6	72.4
Russian Federation	2011	645	88.1	6.1	88.1	2.3	2.1	0.9	0.5	86.8	89.4
	2015	702	90.2	4.5	90.2	1.5	1.9	0.6	1.2	89.5	90.9
Saudi Arabia	2011	659	73.1	12.3	73.1	4.6	8.0	1.1	0.8	78.8	67.3
	2015	618	67.3	13.4	67.3	8.0	7.9	1.5	2.0	76.3	58.4
Serbia	2011	631	91.7	1.5	91.7	2.2	1.4	2.0	1.2	92.0	91.5
	2015	566	93.6	2.8	93.6	1.4	0.7	0.8	0.6	93.8	93.4
Singapore	2011	915	89.0	4.2	89.0	3.4	3.0	0.3	0.1	89.5	88.5
	2015	936	89.1	5.4	89.1	2.8	2.2	0.4	0.1	88.0	90.2
Slovak Republic	2011	814	73.0	13.9	73.0	6.5	4.3	2.2	0.2	70.9	74.8
	2015	831	78.8	10.8	78.8	3.8	5.0	0.9	0.6	74.8	82.7
Slovenia	2011	643	87.5	7.0	87.5	1.6	2.4	1.3	0.3	86.7	88.2
	2015	643	91.5	3.1	91.5	1.9	1.6	1.3	0.5	93.2	89.7
Spain	2011	602	65.9	13.9	65.9	6.8	10.6	1.3	1.4	60.9	70.7
	2015	1090	73.7	9.2	73.7	6.7	8.4	0.7	1.2	73.0	74.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_06 (S041052): Physical Science / Knowing Type: MC Key: B
Label: Which one is a solid

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	66.5	16.0	66.5	7.3	6.0	3.0	1.1	67.0	66.1
	2015	574	77.3	8.1	77.3	6.0	3.3	3.9	1.3	79.6	74.9
Turkey	2011	1070	81.7	7.9	81.7	3.9	4.4	1.2	0.8	81.7	81.7
	2015	924	85.6	5.2	85.6	4.5	3.9	0.3	0.5	82.1	89.0
United Arab Emirates	2011	2091	71.2	12.7	71.2	6.0	7.7	1.3	1.1	73.3	69.1
	2015	3032	75.1	10.5	75.1	5.8	6.2	1.9	0.5	77.8	72.7
United States	2011	1776	85.2	4.0	85.2	3.0	4.0	3.0	0.9	82.7	87.9
	2015	1434	84.7	5.7	84.7	2.4	3.7	2.4	1.0	84.1	85.4

International Avg (n=40)	2011	30268	74.5	9.8	74.5	6.4	6.4	1.9	1.0	74.9	74.0
	2015	30584	77.0	8.7	77.0	5.8	5.5	1.8	1.2	77.1	77.0

Ontario, Canada	2011	657	84.5	4.5	84.5	3.1	3.9	1.3	2.7	83.8	85.1
	2015	661	83.0	4.2	83.0	2.7	5.9	1.6	2.6	84.8	81.6
Quebec, Canada	2011	610	84.6	4.7	84.6	4.8	3.4	2.1	0.4	82.9	86.4
	2015	400	88.5	3.8	88.5	2.6	2.8	1.6	0.7	86.3	90.8
Norway (4)	2011	440	24.0	34.5	24.0	15.1	21.0	4.0	1.3	18.5	29.0
	2015	594	33.7	28.7	33.7	14.5	15.8	4.2	3.1	32.5	34.8
Abu Dhabi, UAE	2011	589	68.5	15.0	68.5	6.2	8.0	0.7	1.6	73.0	64.2
	2015	717	64.8	14.8	64.8	8.9	8.1	2.9	0.6	68.0	62.4
Dubai, UAE	2011	870	76.4	10.8	76.4	4.4	6.2	1.8	0.4	75.0	77.6
	2015	1063	86.4	6.1	86.4	2.4	3.6	0.9	0.5	89.2	83.6
Florida, US	2011	370	88.3	3.2	88.3	3.1	1.4	3.0	1.1	88.1	88.4
	2015	282	88.8	2.8	88.8	2.5	2.6	2.1	1.2	88.1	89.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S07_07 (S041301): Life Science / Applying Type: CR 1 Point
Label: Importance of drinking water

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	5.6	39.6	0.4	49.4	3.6	1.3	45.6	45.9	45.3
	2015	868	4.6	50.5	0.2	40.8	3.0	0.9	55.3	59.2	52.0
Bahrain	2011	570	7.4	8.0	5.3	65.8	12.3	1.2	20.6	27.8	13.5
	2015	592	9.8	10.5	5.2	63.3	9.2	2.1	25.4	30.6	20.3
Belgium (Flemish)	2011	682	3.7	35.2	0.6	57.2	2.9	0.3	39.5	38.6	40.5
	2015	767	3.3	30.9	3.4	56.7	5.2	0.5	37.6	42.1	32.9
Chile	2011	791	2.3	20.6	0.0	64.2	9.7	3.2	22.9	24.8	20.8
	2015	678	5.0	13.1	13.3	57.9	7.6	3.3	31.3	34.1	28.5
Chinese Taipei	2011	609	33.3	6.4	0.0	53.5	6.6	0.1	39.8	39.9	39.6
	2015	616	33.8	9.6	0.6	50.0	5.9	0.0	44.1	42.0	46.1
Croatia	2011	650	4.9	27.1	0.2	62.2	5.4	0.3	32.1	30.9	33.3
	2015	563	8.8	22.0	0.4	63.8	4.8	0.2	31.2	32.2	30.2
Czech Republic	2011	646	6.4	27.4	0.0	56.4	9.3	0.5	33.8	34.8	33.0
	2015	747	3.9	24.1	0.6	59.8	10.3	1.2	28.6	31.3	25.4
Denmark	2011	562	8.2	29.0	0.8	55.9	4.8	1.3	38.0	44.2	30.9
	2015	528	5.4	16.2	1.4	67.5	7.1	2.5	22.9	22.4	23.3
England	2011	496	5.5	43.1	0.0	46.6	4.1	0.7	48.7	54.9	42.6
	2015	574	3.6	47.3	0.8	46.4	1.7	0.1	51.7	55.3	48.3
Finland	2011	667	6.2	49.0	0.1	36.9	7.6	0.3	55.3	58.8	52.0
	2015	718	6.1	46.3	0.1	39.5	7.6	0.4	52.5	54.4	50.7
Georgia	2011	684	6.1	7.7	4.1	65.8	13.6	2.5	18.0	18.3	17.7
	2015	563	4.9	3.9	3.7	70.0	12.0	5.5	12.5	12.9	12.1
Germany	2011	567	9.2	36.5	0.0	42.3	11.1	1.0	45.6	45.9	45.4
	2015	569	9.4	32.6	0.4	50.9	5.3	1.2	42.5	47.1	38.3
Hong Kong SAR	2011	563	26.7	2.8	1.1	62.3	7.1	0.0	30.6	30.7	30.4
	2015	513	17.1	6.5	6.7	65.2	4.5	0.0	30.3	33.6	27.7
Hungary	2011	752	3.8	52.1	0.2	36.5	5.9	1.5	56.2	56.7	55.6
	2015	713	5.2	51.5	0.0	35.5	6.1	1.8	56.7	59.7	53.7
Iran, Islamic Rep. of	2011	818	6.6	6.2	3.0	63.6	18.2	2.5	15.7	18.2	13.2
	2015	546	4.2	1.8	0.9	67.8	24.0	1.3	6.8	7.1	6.5
Ireland	2011	660	2.6	36.6	1.3	53.5	5.0	1.1	40.5	44.3	36.6
	2015	621	2.2	52.4	0.2	42.7	1.8	0.6	54.8	58.7	51.6
Italy	2011	598	7.2	10.7	0.9	73.6	6.8	0.8	18.8	18.8	18.8
	2015	610	8.3	12.8	1.0	70.0	7.0	1.0	22.0	19.3	24.5
Japan	2011	624	9.6	29.2	2.4	54.7	3.7	0.4	41.2	43.2	39.5
	2015	621	14.9	41.6	0.8	36.1	6.3	0.3	57.3	60.3	54.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_07 (S041301): Life Science / Applying Type: CR 1 Point
Label: Importance of drinking water

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	12.0	6.0	25.2	45.3	9.6	1.9	43.2	46.2	40.5
	2015	668	20.9	6.9	1.3	65.7	4.5	0.7	29.1	31.6	26.9
Korea, Rep. of	2011	614	2.6	6.1	0.0	88.3	3.0	0.0	8.7	7.6	9.8
	2015	666	8.8	4.7	0.1	85.2	1.2	0.1	13.5	14.0	13.0
Kuwait	2011	592	0.8	0.5	7.1	47.9	40.5	3.2	8.4	12.3	3.6
	2015	503	4.8	1.6	3.1	41.0	43.9	5.7	9.4	9.7	9.1
Lithuania	2011	657	7.3	3.2	3.9	76.3	8.3	1.0	14.4	17.1	12.2
	2015	655	7.8	9.1	2.7	73.1	6.4	0.9	19.6	23.6	15.6
Morocco	2011	1127	0.8	0.5	0.2	46.6	44.9	7.1	1.5	1.9	1.0
	2015	720	0.8	3.3	0.3	65.9	25.9	3.8	4.4	5.1	3.7
Netherlands	2011	459	3.1	48.4	1.1	45.3	1.9	0.2	52.6	49.5	56.6
	2015	634	2.8	46.3	0.4	46.3	3.4	0.8	49.5	52.1	46.7
New Zealand	2011	800	6.4	32.1	0.0	57.3	3.0	1.2	38.5	36.3	40.7
	2015	913	3.7	44.2	0.1	45.8	4.0	2.3	47.9	45.0	50.5
Northern Ireland	2011	499	2.9	43.6	0.0	48.4	4.6	0.6	46.5	46.6	46.4
	2015	444	4.5	52.7	1.5	38.9	1.6	0.8	58.7	60.7	56.7
Oman	2011	1481	1.7	1.9	2.3	65.6	26.2	2.2	6.0	7.2	4.9
	2015	1301	4.6	3.5	7.0	68.6	15.3	1.0	15.1	17.3	13.0
Portugal	2011	592	3.7	21.7	5.2	65.5	3.1	0.8	30.6	38.6	24.0
	2015	672	7.4	22.2	0.7	65.5	2.7	1.5	30.3	32.0	28.5
Qatar	2011	586	2.4	4.5	1.1	72.1	18.9	0.9	8.0	9.2	6.8
	2015	743	5.3	8.0	1.8	67.8	14.8	2.2	15.2	14.7	15.7
Russian Federation	2011	645	7.7	7.8	1.4	74.4	8.1	0.6	16.9	15.3	18.5
	2015	702	17.1	14.5	3.3	57.9	5.8	1.4	34.9	36.5	33.4
Saudi Arabia	2011	661	4.9	5.0	2.2	69.5	17.6	0.8	12.1	13.3	10.9
	2015	619	3.7	4.5	0.5	60.2	29.0	2.0	8.8	14.9	2.9
Serbia	2011	631	3.0	11.8	2.5	70.7	10.2	1.9	17.2	19.9	14.9
	2015	566	6.3	15.0	2.4	65.1	10.3	0.9	23.7	24.5	22.8
Singapore	2011	915	21.0	18.4	5.8	52.6	2.0	0.1	45.3	42.0	48.4
	2015	936	13.7	33.1	4.9	47.1	1.2	0.1	51.6	52.5	50.8
Slovak Republic	2011	814	3.1	24.1	3.2	61.2	7.6	0.7	30.4	29.1	31.6
	2015	831	2.5	26.5	1.8	60.2	8.3	0.6	30.9	31.3	30.5
Slovenia	2011	644	7.1	16.4	0.8	67.0	7.8	1.0	24.2	24.8	23.5
	2015	643	5.7	21.3	3.8	63.2	5.2	0.8	30.8	29.2	32.5
Spain	2011	602	5.7	20.3	2.0	57.9	12.7	1.4	28.0	27.5	28.4
	2015	1090	7.2	35.6	1.0	49.3	5.6	1.4	43.8	47.3	40.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_07 (S041301): Life Science / Applying Type: CR 1 Point
Label: Importance of drinking water

COUNTRY	Year	N	10 %	11 %	19 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	6.9	36.2	0.1	46.1	9.3	1.4	43.2	45.1	41.6
	2015	574	8.7	31.0	0.0	52.6	6.2	1.5	39.7	43.1	36.4
Turkey	2011	1070	9.7	5.2	2.5	77.3	4.5	0.8	17.4	17.6	17.1
	2015	924	10.0	6.3	3.1	75.4	4.6	0.6	19.4	22.0	16.9
United Arab Emirates	2011	2091	6.6	6.2	1.5	66.3	18.2	1.1	14.4	16.2	12.6
	2015	3032	8.2	8.4	3.0	63.6	16.3	0.5	19.6	22.6	17.1
United States	2011	1776	5.1	32.2	0.0	60.0	1.7	1.0	37.3	36.4	38.3
	2015	1434	4.1	42.4	0.2	50.0	1.9	1.5	46.6	48.3	44.8

International Avg (n=40)	2011	30338	7.0	20.5	2.2	59.1	10.0	1.2	29.7	30.9	28.5
	2015	30677	7.7	22.9	2.1	57.3	8.7	1.4	32.7	34.5	30.9

Ontario, Canada	2011	657	5.3	36.5	1.4	50.2	3.7	2.8	43.2	43.1	43.4
	2015	662	7.9	37.4	0.8	47.4	3.5	3.1	46.1	49.9	42.2
Quebec, Canada	2011	610	2.9	45.8	0.3	45.9	4.4	0.6	49.0	46.9	51.1
	2015	404	8.4	49.4	0.5	37.8	2.6	1.3	58.3	55.9	60.7
Norway (4)	2011	440	3.2	21.8	0.3	59.9	13.5	1.3	25.4	28.8	22.2
	2015	593	2.6	13.4	2.1	70.8	7.6	3.5	18.1	19.2	17.1
Abu Dhabi, UAE	2011	589	5.4	3.6	1.7	68.6	19.0	1.6	10.8	11.8	9.8
	2015	717	6.4	4.9	2.4	66.4	19.4	0.6	13.6	13.7	13.6
Dubai, UAE	2011	870	8.3	13.3	0.1	64.9	12.9	0.6	21.7	22.9	20.7
	2015	1063	12.3	18.6	4.3	57.4	6.8	0.5	35.2	40.6	29.7
Florida, US	2011	370	5.0	33.1	0.0	59.3	1.2	1.4	38.1	39.9	36.4
	2015	282	3.6	44.6	0.0	47.8	2.1	1.9	48.1	56.7	39.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_09 (S041033): Life Science / Applying Type: CR 1 Point
Label: Physical change- mammals in winter

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	11.2	14.7	61.1	11.6	1.4	25.9	28.0	24.0
	2015	868	11.9	16.3	58.8	11.5	1.5	28.2	31.5	25.3
Bahrain	2011	570	8.4	6.3	61.4	22.4	1.5	14.8	17.2	12.3
	2015	592	12.6	8.1	56.6	20.3	2.4	20.8	28.6	13.0
Belgium (Flemish)	2011	682	28.9	9.2	50.9	9.5	1.4	38.2	39.7	36.6
	2015	767	24.1	9.9	53.1	12.2	0.7	34.0	36.1	31.8
Chile	2011	791	3.9	2.3	69.2	20.2	4.6	6.1	5.9	6.4
	2015	678	6.8	3.3	67.3	17.7	4.9	10.1	11.2	9.1
Chinese Taipei	2011	609	14.1	26.1	43.3	16.3	0.1	40.3	37.5	42.6
	2015	616	6.3	23.7	45.8	24.2	0.0	30.0	29.3	30.7
Croatia	2011	650	10.7	9.2	44.7	34.9	0.5	20.0	19.0	20.9
	2015	563	21.8	10.7	40.1	26.9	0.6	32.5	33.7	31.2
Czech Republic	2011	646	19.6	6.0	46.2	27.3	0.9	25.6	26.9	24.6
	2015	747	15.8	8.1	48.2	26.2	1.7	23.9	26.4	21.1
Denmark	2011	562	19.2	12.6	51.7	14.7	1.8	31.8	30.9	32.9
	2015	528	19.9	11.1	49.2	16.3	3.4	31.0	31.8	30.2
England	2011	496	14.6	13.5	52.2	18.4	1.2	28.2	34.6	21.8
	2015	574	14.7	16.2	56.4	12.4	0.3	30.8	32.3	29.4
Finland	2011	667	24.5	15.5	44.3	15.4	0.3	40.1	42.6	37.7
	2015	718	28.3	10.8	47.2	12.2	1.4	39.2	45.8	32.8
Georgia	2011	669	14.0	7.8	41.6	32.5	4.1	21.8	24.1	19.5
	2015	563	16.4	6.3	41.3	29.6	6.5	22.7	19.9	25.3
Germany	2011	567	27.0	6.3	31.9	33.5	1.3	33.3	36.2	30.5
	2015	569	17.7	11.7	36.1	32.0	2.6	29.4	29.6	29.2
Hong Kong SAR	2011	563	10.3	17.4	57.1	15.2	0.0	27.8	34.5	22.6
	2015	513	11.2	19.1	59.0	10.6	0.0	30.4	29.0	31.5
Hungary	2011	752	29.4	3.9	40.9	23.6	2.3	33.2	37.4	28.5
	2015	713	25.2	4.7	46.3	20.2	3.5	29.9	26.4	33.3
Iran, Islamic Rep. of	2011	818	2.3	6.8	46.7	40.2	4.0	9.1	10.7	7.5
	2015	546	1.8	2.7	47.6	44.9	3.0	4.5	4.7	4.4
Ireland	2011	660	12.4	13.8	56.3	16.3	1.2	26.2	25.7	26.7
	2015	621	16.6	10.5	62.2	9.6	1.1	27.1	27.4	26.8
Italy	2011	598	25.1	16.2	38.0	19.5	1.2	41.3	41.4	41.2
	2015	611	17.2	16.0	42.2	23.5	1.2	33.2	32.2	34.0
Japan	2011	624	9.0	20.3	61.1	9.0	0.7	29.2	26.2	31.9
	2015	621	14.1	26.3	45.7	13.3	0.6	40.4	40.7	40.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_09 (S041033): Life Science / Applying Type: CR 1 Point
Label: Physical change- mammals in winter

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	625	16.4	14.8	45.3	20.5	3.0	31.2	34.0	28.6
	2015	668	24.3	15.5	49.7	9.8	0.7	39.8	41.4	38.4
Korea, Rep. of	2011	614	20.1	6.3	65.1	8.5	0.0	26.4	25.4	27.4
	2015	666	18.0	7.2	67.3	7.3	0.1	25.2	26.0	24.4
Kuwait	2011	593	1.8	3.0	45.2	46.1	3.8	4.9	5.2	4.5
	2015	502	4.4	4.6	33.8	49.6	7.7	8.9	10.0	7.8
Lithuania	2011	657	8.8	6.8	64.0	19.4	1.0	15.7	18.1	13.7
	2015	655	13.1	5.2	56.8	23.6	1.4	18.3	19.1	17.4
Morocco	2011	1128	0.2	0.3	34.4	56.9	8.2	0.5	0.5	0.5
	2015	721	2.6	1.1	49.7	41.7	5.0	3.7	4.1	3.3
Netherlands	2011	459	32.4	6.7	53.5	7.0	0.4	39.1	41.3	36.8
	2015	634	20.1	15.5	52.7	10.3	1.4	35.6	39.1	32.0
New Zealand	2011	800	10.2	10.9	65.2	11.9	1.8	21.1	22.9	19.2
	2015	913	11.0	12.0	63.2	10.8	3.0	23.0	25.0	21.3
Northern Ireland	2011	499	15.3	9.4	56.3	18.3	0.6	24.8	27.9	22.1
	2015	444	14.9	12.1	59.9	12.3	0.8	27.0	32.9	20.9
Oman	2011	1481	2.3	6.7	45.4	42.8	2.8	9.0	13.0	5.4
	2015	1302	5.8	6.4	59.9	26.5	1.3	12.3	15.1	9.5
Portugal	2011	592	6.4	17.5	58.4	16.7	1.0	23.9	24.2	23.7
	2015	672	3.5	13.2	64.9	14.5	3.9	16.7	14.2	19.4
Qatar	2011	586	4.4	2.7	64.0	27.9	1.0	7.2	8.8	5.5
	2015	743	4.6	3.9	63.2	25.4	2.9	8.6	7.6	9.5
Russian Federation	2011	645	22.9	12.8	49.4	13.8	1.1	35.7	38.1	33.3
	2015	702	25.6	11.6	48.3	12.8	1.8	37.2	38.4	36.0
Saudi Arabia	2011	663	5.1	14.5	54.3	24.7	1.3	19.6	21.9	17.2
	2015	619	3.0	4.4	52.1	37.9	2.7	7.4	10.8	4.1
Serbia	2011	631	15.7	3.3	51.2	27.0	2.8	19.0	18.0	19.8
	2015	566	14.8	6.5	52.0	25.4	1.3	21.3	22.0	20.6
Singapore	2011	915	16.8	17.8	61.2	4.0	0.3	34.6	34.8	34.3
	2015	936	12.6	22.8	61.4	3.1	0.1	35.4	34.8	36.0
Slovak Republic	2011	814	24.0	6.4	46.4	21.8	1.3	30.4	33.2	27.9
	2015	831	12.8	5.0	54.0	27.1	1.1	17.7	18.2	17.3
Slovenia	2011	644	18.7	3.5	50.1	25.9	1.8	22.3	24.3	20.3
	2015	643	28.4	6.0	44.0	20.1	1.5	34.4	34.8	34.0
Spain	2011	602	4.4	3.7	58.0	31.9	2.0	8.1	8.3	7.9
	2015	1090	7.5	5.5	61.1	24.3	1.6	13.0	13.6	12.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_09 (S041033): Life Science / Applying Type: CR 1 Point
Label: Physical change- mammals in winter

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	21.8	4.7	48.8	22.4	2.3	26.5	30.7	22.8
	2015	574	25.7	4.0	48.4	19.4	2.4	29.8	33.3	26.2
Turkey	2011	1070	8.8	3.1	66.5	20.3	1.4	11.9	14.2	9.6
	2015	924	11.7	4.2	62.6	20.2	1.2	16.0	15.5	16.4
United Arab Emirates	2011	2091	4.7	8.7	53.6	31.4	1.6	13.4	15.5	11.4
	2015	3032	7.0	9.6	55.1	27.4	0.9	16.6	17.8	15.6
United States	2011	1776	16.9	18.1	57.6	5.5	1.9	35.0	35.4	34.7
	2015	1434	19.9	18.3	55.0	4.7	2.1	38.2	37.5	39.0

International Avg (n=40)	2011	30326	14.1	9.7	52.3	22.1	1.7	23.8	25.4	22.4
	2015	30679	14.4	10.3	52.9	20.4	2.0	24.6	25.7	23.5

Ontario, Canada	2011	657	15.6	16.3	53.5	10.6	4.1	31.8	32.2	31.5
	2015	662	18.5	16.9	50.4	9.7	4.5	35.4	35.2	35.7
Quebec, Canada	2011	610	20.7	12.9	56.0	9.7	0.7	33.7	37.0	30.3
	2015	404	34.1	15.5	41.2	7.6	1.5	49.7	55.5	43.5
Norway (4)	2011	440	18.0	4.7	49.2	23.5	4.6	22.7	23.6	21.8
	2015	594	18.5	7.9	48.8	19.6	5.1	26.4	26.9	26.1
Abu Dhabi, UAE	2011	589	4.2	7.8	54.6	31.4	2.1	11.9	15.9	8.2
	2015	717	5.0	8.7	53.8	30.9	1.5	13.8	13.4	14.0
Dubai, UAE	2011	870	5.8	9.7	53.4	30.1	1.0	15.5	15.2	15.7
	2015	1063	12.5	13.1	56.8	17.0	0.7	25.5	28.8	22.2
Florida, US	2011	370	14.8	20.1	58.4	4.5	2.2	34.8	34.0	35.6
	2015	282	16.8	18.4	58.0	3.9	2.9	35.2	34.6	35.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_l1 (S041077): Physical Science / Applying Type: CR 1 Point
Label: Label the poles on the top magnet

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	35.6	30.0	11.7	8.6	12.4	1.7	35.6	33.6	37.4
	2015	868	40.3	32.0	7.8	7.2	9.7	3.1	40.3	39.3	41.1
Bahrain	2011	570	27.8	13.5	2.1	32.7	20.8	3.1	27.8	27.2	28.3
	2015	592	32.0	11.6	1.8	30.8	21.0	2.7	32.0	38.4	25.6
Belgium (Flemish)	2011	682	37.4	17.9	9.3	23.5	9.8	2.0	37.4	36.1	38.9
	2015	767	40.7	15.5	7.3	21.5	13.9	1.1	40.7	40.2	41.2
Chile	2011	791	17.0	26.5	5.0	19.1	26.7	5.8	17.0	17.5	16.4
	2015	678	17.8	27.6	6.0	19.8	22.7	6.2	17.8	14.9	20.8
Chinese Taipei	2011	609	70.0	18.1	0.0	3.2	8.7	0.1	70.0	73.5	67.0
	2015	616	71.8	17.2	0.0	4.8	6.1	0.0	71.8	69.5	74.1
Croatia	2011	650	26.3	20.0	8.3	24.8	19.5	1.0	26.3	21.2	31.2
	2015	563	36.0	19.2	8.3	15.8	19.7	1.0	36.0	35.1	37.1
Czech Republic	2011	646	40.9	20.2	5.9	13.1	18.0	1.9	40.9	43.7	38.6
	2015	747	49.2	19.8	4.8	7.8	15.9	2.4	49.2	48.1	50.4
Denmark	2011	562	28.3	18.8	29.8	7.7	12.8	2.6	28.3	24.9	32.1
	2015	528	23.2	22.8	25.5	9.6	13.1	5.8	23.2	21.5	24.7
England	2011	496	46.2	24.4	5.5	10.3	11.6	2.0	46.2	47.9	44.5
	2015	574	53.1	19.9	7.7	8.4	10.3	0.7	53.1	49.6	56.4
Finland	2011	667	59.4	20.2	1.0	8.1	11.0	0.3	59.4	60.0	58.8
	2015	718	54.2	23.4	0.2	9.8	10.7	1.7	54.2	57.0	51.5
Georgia	2011	684	13.8	12.4	34.2	10.5	22.8	6.3	13.8	12.9	14.6
	2015	563	26.3	15.4	19.5	11.4	19.7	7.7	26.3	19.5	32.5
Germany	2011	567	49.0	16.7	5.5	8.5	18.8	1.5	49.0	39.4	57.9
	2015	569	44.9	14.1	5.1	8.6	23.6	3.6	44.9	42.8	46.8
Hong Kong SAR	2011	563	54.5	17.5	1.3	13.3	13.4	0.0	54.5	47.7	59.8
	2015	513	59.5	15.2	1.7	14.4	9.1	0.0	59.5	58.8	60.2
Hungary	2011	752	42.1	17.9	4.1	20.7	12.0	3.2	42.1	38.8	45.8
	2015	713	47.6	19.4	4.8	12.8	11.3	4.0	47.6	48.0	47.3
Iran, Islamic Rep. of	2011	818	38.3	15.9	9.6	17.0	14.3	4.9	38.3	33.7	43.0
	2015	546	33.1	14.0	13.6	16.9	18.0	4.5	33.1	31.5	34.9
Ireland	2011	660	37.8	30.0	8.8	12.1	9.3	2.0	37.8	40.8	34.8
	2015	621	43.4	28.3	10.1	8.2	7.8	2.3	43.4	40.1	46.2
Italy	2011	598	34.3	20.4	3.6	18.4	21.5	1.9	34.3	34.5	34.0
	2015	613	35.4	24.0	1.7	13.9	22.9	2.1	35.4	32.0	38.3
Japan	2011	624	83.6	9.0	0.0	3.3	2.6	1.5	83.6	84.2	83.2
	2015	621	84.0	7.1	0.0	4.5	3.4	1.0	84.0	84.5	83.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_l1 (S041077): Physical Science / Applying Type: CR 1 Point
Label: Label the poles on the top magnet

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	52.1	9.0	0.9	18.5	16.2	3.1	52.1	50.8	53.4
	2015	668	57.9	8.3	0.3	19.5	12.9	1.1	57.9	56.5	59.2
Korea, Rep. of	2011	614	80.5	14.4	0.0	2.7	2.3	0.0	80.5	81.9	79.1
	2015	666	81.7	13.8	0.0	2.0	2.2	0.4	81.7	80.6	82.7
Kuwait	2011	593	43.1	4.3	0.4	34.0	13.5	4.7	43.1	47.3	38.0
	2015	503	24.7	14.5	1.1	20.4	30.6	8.8	24.7	27.1	22.1
Lithuania	2011	657	46.6	16.9	5.2	13.2	17.2	1.0	46.6	45.7	47.3
	2015	655	45.8	17.3	6.4	9.4	19.6	1.4	45.8	42.5	49.2
Morocco	2011	1129	6.7	4.7	0.1	30.2	48.8	9.5	6.7	6.9	6.5
	2015	719	17.6	9.0	0.0	37.2	29.7	6.4	17.6	18.0	17.2
Netherlands	2011	459	48.1	18.4	5.0	18.4	9.1	1.1	48.1	46.6	50.0
	2015	634	42.7	17.6	7.4	19.6	10.6	2.2	42.7	42.1	43.4
New Zealand	2011	800	30.3	28.4	12.7	13.3	13.2	2.1	30.3	26.5	34.1
	2015	913	35.9	25.7	8.4	13.2	13.4	3.5	35.9	37.1	34.8
Northern Ireland	2011	499	33.7	27.5	13.6	12.7	11.7	0.7	33.7	34.0	33.5
	2015	444	36.9	29.5	9.6	13.5	9.5	1.1	36.9	37.7	36.1
Oman	2011	1481	17.8	10.4	0.5	27.5	40.0	3.7	17.8	18.7	17.0
	2015	1302	31.8	10.1	1.8	21.9	32.7	1.7	31.8	36.6	27.2
Portugal	2011	592	39.8	23.8	4.4	11.1	19.6	1.3	39.8	38.4	41.0
	2015	672	35.4	21.8	5.4	12.6	18.7	6.1	35.4	31.2	40.0
Qatar	2011	586	22.0	17.1	3.3	25.6	30.2	1.8	22.0	26.5	17.7
	2015	743	28.8	16.4	2.1	25.3	23.3	4.1	28.8	30.0	27.5
Russian Federation	2011	645	59.9	15.9	1.3	12.3	8.6	2.0	59.9	59.8	60.1
	2015	702	67.8	12.6	1.0	9.2	7.2	2.3	67.8	66.2	69.4
Saudi Arabia	2011	663	24.4	8.1	7.7	30.7	27.5	1.5	24.4	25.2	23.5
	2015	620	18.3	7.6	0.0	32.4	37.9	3.8	18.3	23.1	13.7
Serbia	2011	631	41.8	19.4	0.5	17.9	16.7	3.6	41.8	39.8	43.4
	2015	566	43.2	11.2	4.1	19.2	18.8	3.6	43.2	44.8	41.6
Singapore	2011	915	87.4	6.5	0.3	3.3	2.2	0.3	87.4	88.2	86.7
	2015	936	89.7	6.2	0.0	2.8	1.1	0.1	89.7	91.0	88.4
Slovak Republic	2011	814	49.0	18.1	5.4	13.3	12.3	1.8	49.0	43.1	54.2
	2015	831	56.8	16.1	4.5	8.8	11.8	2.0	56.8	56.3	57.2
Slovenia	2011	644	48.9	16.2	8.4	12.8	11.6	2.2	48.9	48.2	49.6
	2015	643	56.8	14.0	8.0	9.3	9.5	2.5	56.8	53.2	60.5
Spain	2011	602	31.5	21.3	6.1	17.2	20.9	2.9	31.5	29.2	33.8
	2015	1090	42.7	6.9	2.9	29.9	15.1	2.5	42.7	39.4	45.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_l1 (S041077): Physical Science / Applying Type: CR 1 Point
Label: Label the poles on the top magnet

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	43.7	13.1	1.6	17.0	21.4	3.2	43.7	44.7	42.8
	2015	574	46.5	17.6	2.9	9.9	19.6	3.5	46.5	47.3	46.2
Turkey	2011	1070	27.2	15.3	1.0	35.3	19.6	1.6	27.2	24.8	29.5
	2015	924	37.0	13.9	0.7	27.5	18.9	1.9	37.0	37.0	37.1
United Arab Emirates	2011	2090	27.1	15.7	3.7	20.6	30.6	2.3	27.1	27.6	26.6
	2015	3032	39.4	18.0	2.3	13.3	25.6	1.3	39.4	40.9	38.1
United States	2011	1776	48.2	22.6	4.4	15.5	6.7	2.8	48.2	44.7	51.9
	2015	1434	49.5	22.7	4.5	14.0	5.9	3.5	49.5	48.7	50.3

International Avg (n=40)	2011	30342	41.3	17.4	5.8	16.5	16.6	2.4	41.3	40.4	42.1
	2015	30681	44.5	16.9	5.0	14.9	15.8	2.8	44.5	43.9	45.0

Ontario, Canada	2011	657	42.3	27.0	6.9	9.5	8.6	5.6	42.3	38.0	46.6
	2015	662	45.3	27.6	2.9	8.0	10.6	5.7	45.3	45.0	45.7
Quebec, Canada	2011	610	38.7	21.5	9.0	15.9	13.4	1.4	38.7	33.5	43.9
	2015	404	44.3	22.5	6.3	14.9	9.4	2.6	44.3	40.0	48.9
Norway (4)	2011	440	25.9	21.7	4.6	9.7	33.0	5.1	25.9	25.2	26.6
	2015	592	25.1	21.7	4.9	12.4	29.3	6.6	25.1	28.3	22.5
Abu Dhabi, UAE	2011	589	22.3	14.0	3.3	24.6	32.9	2.9	22.3	23.4	21.2
	2015	717	33.0	14.9	2.1	14.6	33.4	2.0	33.0	33.6	32.6
Dubai, UAE	2011	869	33.7	20.7	5.3	16.7	22.2	1.3	33.7	36.3	31.5
	2015	1063	52.6	20.9	2.9	9.3	13.4	1.0	52.6	53.9	51.2
Florida, US	2011	370	48.2	22.0	4.9	14.9	7.2	2.9	48.2	44.4	52.0
	2015	282	57.8	20.7	2.1	11.3	4.7	3.3	57.8	59.5	56.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_12 (S041209): Earth Science / Knowing Type: MC Key: C
Label: Time Earth orbits the sun once

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	46.3	34.5	6.9	46.3	6.0	3.6	2.7	41.4	50.7
	2015	868	48.7	34.0	5.4	48.7	6.5	1.1	4.3	44.2	52.6
Bahrain	2011	570	30.1	54.7	4.5	30.1	6.3	0.6	3.9	27.3	32.8
	2015	592	41.7	44.7	4.8	41.7	2.7	2.2	3.8	44.0	39.5
Belgium (Flemish)	2011	682	41.8	48.6	4.1	41.8	2.5	0.8	2.1	36.2	47.7
	2015	767	39.5	50.2	3.1	39.5	4.0	1.3	1.8	37.5	41.6
Chile	2011	791	42.4	35.8	4.9	42.4	7.3	2.1	7.6	42.7	42.0
	2015	678	30.3	46.3	5.7	30.3	8.5	1.1	8.1	25.9	34.8
Chinese Taipei	2011	609	46.5	41.0	5.3	46.5	6.3	0.7	0.2	41.8	50.4
	2015	616	47.8	39.1	6.2	47.8	6.1	0.5	0.3	42.2	53.2
Croatia	2011	650	44.5	47.5	1.6	44.5	3.9	1.4	1.1	43.6	45.4
	2015	563	49.5	40.7	3.0	49.5	5.3	0.3	1.2	47.6	51.6
Czech Republic	2011	646	49.5	41.4	4.0	49.5	1.0	2.1	2.1	47.6	51.0
	2015	747	49.9	40.1	4.6	49.9	1.5	1.1	2.7	51.5	48.1
Denmark	2011	562	46.7	35.9	7.4	46.7	3.4	3.0	3.6	46.4	47.0
	2015	528	48.5	32.7	5.8	48.5	3.5	2.3	7.2	46.2	50.6
England	2011	496	52.2	33.6	4.5	52.2	4.5	2.5	2.7	47.7	56.5
	2015	574	51.9	32.2	6.3	51.9	6.2	1.8	1.7	45.2	58.3
Finland	2011	667	52.1	24.6	8.0	52.1	13.8	0.9	0.6	52.5	51.7
	2015	718	46.3	27.8	6.4	46.3	15.1	2.2	2.2	44.6	48.0
Georgia	2011	684	33.7	46.7	4.4	33.7	7.8	0.8	6.7	35.6	32.0
	2015	563	37.3	39.4	4.5	37.3	7.7	1.4	9.6	33.5	40.8
Germany	2011	567	44.8	43.2	4.9	44.8	4.6	0.9	1.6	42.0	47.4
	2015	569	45.9	35.9	6.5	45.9	5.8	1.5	4.2	44.4	47.3
Hong Kong SAR	2011	563	55.0	32.5	5.1	55.0	6.1	1.0	0.4	50.9	58.1
	2015	513	46.7	40.2	3.8	46.7	8.0	0.3	1.0	39.0	52.9
Hungary	2011	752	52.2	36.5	3.9	52.2	3.1	0.6	3.8	51.4	53.0
	2015	713	49.5	38.9	2.4	49.5	3.1	0.8	5.2	48.0	50.9
Iran, Islamic Rep. of	2011	818	51.0	29.9	7.6	51.0	4.1	1.6	5.8	49.0	53.0
	2015	546	46.4	38.9	5.2	46.4	2.4	1.9	5.2	43.2	49.8
Ireland	2011	660	46.4	37.4	4.1	46.4	8.4	1.3	2.3	47.3	45.6
	2015	621	49.7	35.6	3.2	49.7	7.4	1.0	3.1	44.1	54.4
Italy	2011	598	43.1	44.5	3.4	43.1	4.7	1.9	2.5	37.5	49.3
	2015	613	48.1	36.3	2.5	48.1	7.4	2.3	3.3	43.6	52.1
Japan	2011	624	43.1	44.7	4.2	43.1	5.4	0.2	2.4	36.0	49.2
	2015	621	39.7	50.1	3.9	39.7	4.5	0.2	1.5	34.6	44.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_12 (S041209): Earth Science / Knowing Type: MC Key: C
Label: Time Earth orbits the sun once

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	37.1	50.3	3.8	37.1	2.0	2.5	4.3	31.8	42.0
	2015	668	46.9	49.8	1.0	46.9	1.0	0.3	1.1	43.2	50.2
Korea, Rep. of	2011	614	49.2	42.0	2.9	49.2	5.2	0.5	0.2	46.5	51.9
	2015	666	57.7	32.6	3.7	57.7	5.1	0.6	0.4	55.8	59.5
Kuwait	2011	586	49.5	21.4	13.1	49.5	5.9	5.4	4.6	50.8	47.8
	2015	503	36.6	27.5	12.5	36.6	8.7	5.3	9.4	39.1	33.8
Lithuania	2011	657	38.7	51.1	4.6	38.7	4.2	0.2	1.3	34.2	42.4
	2015	655	42.5	46.4	3.9	42.5	4.9	0.7	1.6	35.4	49.8
Morocco	2011	1088	17.4	43.5	13.0	17.4	12.5	2.8	10.8	17.4	17.5
	2015	719	13.1	57.7	10.2	13.1	9.0	2.8	7.1	13.4	12.9
Netherlands	2011	459	49.4	39.9	6.2	49.4	2.3	0.8	1.5	46.7	52.7
	2015	634	46.5	38.9	5.4	46.5	4.5	1.9	2.9	43.6	49.5
New Zealand	2011	800	32.8	45.1	8.9	32.8	8.4	2.2	2.6	30.0	35.6
	2015	913	36.3	41.6	6.8	36.3	7.9	2.1	5.3	34.5	37.9
Northern Ireland	2011	499	40.7	43.2	5.3	40.7	7.1	2.5	1.0	40.2	41.2
	2015	436	43.6	36.6	7.2	43.6	12.1	0.4	0.0	41.5	45.7
Oman	2011	1481	23.5	47.6	12.8	23.5	10.0	1.3	4.8	24.4	22.7
	2015	1298	29.1	51.0	9.4	29.1	7.0	1.5	2.0	28.7	29.5
Portugal	2011	592	54.6	35.2	2.8	54.6	3.9	0.4	3.0	52.2	56.6
	2015	672	48.3	33.5	5.9	48.3	5.1	0.3	6.9	42.5	54.6
Qatar	2011	586	30.6	46.4	9.4	30.6	10.3	1.5	1.8	31.2	30.1
	2015	743	35.1	44.4	7.8	35.1	6.5	1.5	4.6	34.3	36.0
Russian Federation	2011	645	45.6	45.7	4.1	45.6	1.3	0.8	2.6	44.9	46.4
	2015	702	55.7	36.5	2.8	55.7	1.2	1.1	2.7	55.2	56.1
Saudi Arabia	2011	660	31.6	53.1	9.8	31.6	3.6	0.1	1.7	27.0	36.4
	2015	617	28.7	50.1	9.7	28.7	5.9	1.3	4.3	28.1	29.3
Serbia	2011	631	32.0	55.0	3.7	32.0	3.1	1.7	4.6	26.3	36.7
	2015	566	32.5	54.3	3.4	32.5	3.7	1.8	4.2	33.7	31.3
Singapore	2011	915	33.2	52.2	6.4	33.2	7.4	0.3	0.5	31.0	35.5
	2015	936	32.4	51.8	6.9	32.4	8.4	0.3	0.2	31.9	32.8
Slovak Republic	2011	814	53.0	40.3	2.5	53.0	1.4	0.8	2.0	50.5	55.2
	2015	831	43.3	47.7	4.6	43.3	1.3	0.9	2.4	39.5	46.9
Slovenia	2011	643	43.1	48.4	3.0	43.1	1.6	1.2	2.7	42.1	44.2
	2015	643	49.0	43.8	2.8	49.0	0.6	0.7	3.2	43.1	55.1
Spain	2011	602	48.4	42.3	2.0	48.4	1.6	1.0	4.7	45.0	51.8
	2015	1090	59.4	32.9	0.8	59.4	2.8	1.2	2.8	54.8	63.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_12 (S041209): Earth Science / Knowing Type: MC Key: C
Label: Time Earth orbits the sun once

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	68.3	17.6	6.0	68.3	1.7	1.9	4.4	73.6	63.8
	2015	574	66.3	19.6	4.7	66.3	3.4	1.7	4.2	64.8	68.1
Turkey	2011	1070	40.8	47.2	5.2	40.8	4.5	0.7	1.7	39.8	41.6
	2015	924	41.2	47.0	4.7	41.2	4.6	0.4	2.1	40.3	42.0
United Arab Emirates	2011	2090	37.3	43.5	8.2	37.3	6.9	1.2	2.8	36.0	38.6
	2015	3032	40.0	41.5	7.7	40.0	6.6	2.1	2.2	39.1	40.8
United States	2011	1776	50.2	36.2	4.3	50.2	4.1	1.7	3.5	48.5	52.0
	2015	1434	52.8	29.9	5.1	52.8	5.7	2.5	4.0	49.9	55.8

International Avg (n=40)	2011	30290	43.2	41.5	5.7	43.2	5.2	1.4	3.0	41.2	45.1
	2015	30666	43.9	40.5	5.3	43.9	5.5	1.4	3.5	41.3	46.3

Ontario, Canada	2011	657	30.0	51.7	5.0	30.0	6.5	0.9	6.0	25.5	34.3
	2015	661	33.9	50.1	4.3	33.9	4.4	0.9	6.5	33.3	34.5
Quebec, Canada	2011	610	48.4	38.2	4.7	48.4	4.6	1.7	2.3	47.7	49.1
	2015	403	52.6	34.9	4.1	52.6	4.3	1.4	2.6	53.1	51.9
Norway (4)	2011	440	51.3	32.6	4.5	51.3	2.7	2.4	6.5	47.0	55.3
	2015	594	52.4	31.8	4.0	52.4	3.3	0.7	7.8	53.9	51.1
Abu Dhabi, UAE	2011	589	34.8	47.1	8.3	34.8	5.7	0.9	3.2	37.0	32.8
	2015	717	34.0	43.9	9.1	34.0	9.0	1.5	2.5	32.6	35.1
Dubai, UAE	2011	869	43.1	38.8	5.5	43.1	8.1	2.4	2.1	36.5	48.6
	2015	1063	53.8	33.2	5.0	53.8	4.0	2.7	1.4	56.9	50.6
Florida, US	2011	370	59.9	28.3	3.6	59.9	3.6	1.7	2.9	56.3	63.3
	2015	282	53.6	32.7	4.6	53.6	2.3	3.4	3.3	53.7	53.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S07_l3 (S041081): Earth Science / Knowing Type: CR 2 Points
Label: Two things make up crust

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	34.2	27.4	24.8	10.6	3.1	61.6	34.2	31.6	36.4
	2015	868	42.8	21.6	22.8	8.5	4.3	64.4	42.8	42.7	43.0
Bahrain	2011	570	18.4	8.1	51.3	18.1	4.0	26.5	18.4	19.8	17.0
	2015	592	21.4	13.1	44.5	17.0	4.1	34.5	21.4	24.0	18.8
Belgium (Flemish)	2011	682	35.6	28.7	24.6	9.0	2.1	64.3	35.6	30.4	41.2
	2015	767	38.8	27.4	19.1	12.8	1.9	66.2	38.8	33.4	44.4
Chile	2011	791	15.2	12.0	35.3	29.7	7.8	27.2	15.2	14.0	16.5
	2015	678	17.6	11.7	40.3	22.3	8.2	29.3	17.6	15.0	20.2
Chinese Taipei	2011	609	24.8	24.6	28.2	22.3	0.2	49.3	24.8	27.1	22.8
	2015	616	26.3	2.8	44.3	26.1	0.5	29.1	26.3	21.0	31.4
Croatia	2011	650	26.3	17.5	22.0	33.0	1.1	43.9	26.3	24.8	27.8
	2015	563	33.0	15.7	23.6	26.5	1.2	48.7	33.0	29.4	37.0
Czech Republic	2011	646	32.9	20.9	21.8	22.2	2.3	53.8	32.9	27.8	37.2
	2015	747	30.6	24.5	21.2	20.5	3.1	55.1	30.6	33.3	27.5
Denmark	2011	562	45.4	23.2	17.1	10.6	3.8	68.6	45.4	43.0	48.1
	2015	528	38.6	29.5	14.5	9.9	7.5	68.1	38.6	34.8	42.0
England	2011	496	38.0	22.3	23.6	13.1	3.0	60.3	38.0	44.4	31.8
	2015	574	25.5	35.8	23.5	13.3	1.9	61.2	25.5	27.0	23.9
Finland	2011	667	41.2	24.2	19.8	14.2	0.6	65.3	41.2	37.1	44.9
	2015	718	49.9	15.0	20.2	12.7	2.2	64.9	49.9	50.9	49.0
Georgia	2011	683	16.4	8.1	28.2	40.3	7.0	24.5	16.4	16.0	16.9
	2015	563	13.3	9.0	29.9	37.6	10.2	22.3	13.3	9.1	17.1
Germany	2011	567	40.7	21.3	15.1	21.3	1.6	62.0	40.7	36.3	44.7
	2015	569	40.1	20.2	13.1	22.2	4.4	60.3	40.1	34.4	45.3
Hong Kong SAR	2011	563	25.2	32.9	33.4	8.2	0.4	58.0	25.2	26.0	24.5
	2015	513	31.7	28.4	31.1	7.8	1.0	60.0	31.7	27.2	35.3
Hungary	2011	752	31.1	16.8	26.2	22.1	3.8	47.9	31.1	29.0	33.4
	2015	713	31.0	20.8	23.2	19.6	5.4	51.8	31.0	27.9	33.9
Iran, Islamic Rep. of	2011	819	7.1	12.2	46.9	27.8	6.0	19.3	7.1	5.5	8.7
	2015	546	5.7	8.8	49.8	30.5	5.3	14.4	5.7	2.8	8.7
Ireland	2011	660	37.5	25.3	22.2	12.7	2.3	62.8	37.5	41.2	33.8
	2015	621	44.5	25.5	17.4	9.5	3.1	70.0	44.5	40.5	48.0
Italy	2011	598	19.8	28.2	27.9	21.4	2.7	48.0	19.8	17.4	22.4
	2015	611	21.9	25.7	23.0	26.0	3.4	47.6	21.9	18.8	24.6
Japan	2011	624	23.0	30.7	32.6	11.3	2.4	53.7	23.0	23.4	22.6
	2015	621	29.0	24.0	32.0	13.4	1.7	53.0	29.0	26.6	31.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_l3 (S041081): Earth Science / Knowing Type: CR 2 Points
Label: Two things make up crust

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	17.6	18.3	38.8	19.8	5.4	36.0	17.6	12.9	22.0
	2015	668	21.5	41.3	25.1	11.1	1.1	62.7	21.5	20.1	22.7
Korea, Rep. of	2011	614	28.4	20.6	38.8	12.1	0.2	49.0	28.4	25.9	30.8
	2015	666	29.4	23.7	36.7	9.9	0.4	53.1	29.4	25.3	33.5
Kuwait	2011	593	11.3	11.8	36.5	34.6	5.9	23.1	11.3	13.2	9.0
	2015	501	12.3	7.6	31.1	39.4	9.6	19.9	12.3	14.4	10.1
Lithuania	2011	657	31.1	18.4	26.4	22.9	1.3	49.5	31.1	34.8	28.2
	2015	655	32.3	17.1	22.5	26.5	1.6	49.5	32.3	36.6	28.0
Morocco	2011	1129	1.8	3.9	38.2	44.8	11.3	5.7	1.8	1.1	2.6
	2015	706	5.1	7.6	53.2	27.4	6.7	12.7	5.1	6.1	4.0
Netherlands	2011	459	39.6	37.5	17.8	3.6	1.5	77.2	39.6	36.2	44.5
	2015	634	38.6	28.0	21.9	8.4	3.1	66.6	38.6	36.5	40.5
New Zealand	2011	800	30.7	27.3	30.6	8.8	2.6	58.0	30.7	28.1	33.2
	2015	913	36.7	24.4	24.6	8.8	5.4	61.1	36.7	33.3	39.7
Northern Ireland	2011	499	34.6	24.0	26.1	14.2	1.0	58.7	34.6	33.0	36.1
	2015	444	37.4	25.4	24.8	11.1	1.3	62.8	37.4	40.6	34.1
Oman	2011	1481	22.3	9.2	41.1	22.5	4.9	31.5	22.3	24.4	20.5
	2015	1302	19.5	13.3	52.9	12.1	2.2	32.8	19.5	23.5	15.6
Portugal	2011	592	34.9	15.7	28.0	18.3	3.0	50.7	34.9	35.6	34.4
	2015	672	27.1	19.4	22.3	24.3	6.9	46.4	27.1	24.2	30.1
Qatar	2011	585	15.8	8.8	52.3	21.3	1.8	24.6	15.8	17.6	14.0
	2015	743	15.0	14.3	45.0	21.0	4.8	29.3	15.0	16.3	13.8
Russian Federation	2011	645	27.3	36.0	18.4	15.7	2.6	63.3	27.3	26.3	28.2
	2015	702	36.9	34.1	14.3	11.6	3.1	71.0	36.9	38.4	35.4
Saudi Arabia	2011	660	18.0	11.0	44.0	25.4	1.7	29.0	18.0	21.4	14.3
	2015	620	13.8	8.6	36.9	36.1	4.7	22.3	13.8	20.3	7.4
Serbia	2011	631	28.3	16.7	19.2	31.2	4.6	45.0	28.3	25.8	30.3
	2015	566	24.4	18.8	20.9	31.2	4.7	43.2	24.4	22.8	26.1
Singapore	2011	915	20.8	39.1	34.7	5.0	0.5	59.9	20.8	17.0	24.4
	2015	936	30.0	27.2	35.8	6.8	0.2	57.2	30.0	28.2	31.8
Slovak Republic	2011	814	20.5	12.0	42.7	22.7	2.1	32.5	20.5	19.4	21.5
	2015	831	17.8	10.5	51.8	17.4	2.5	28.3	17.8	15.1	20.5
Slovenia	2011	644	32.5	15.8	24.0	24.8	2.8	48.3	32.5	31.4	33.6
	2015	643	32.5	17.7	22.0	24.6	3.2	50.2	32.5	23.9	41.5
Spain	2011	602	21.7	9.4	33.1	31.0	4.7	31.1	21.7	17.7	25.6
	2015	1090	25.7	14.8	32.0	24.6	2.9	40.5	25.7	24.9	26.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_l3 (S041081): Earth Science / Knowing Type: CR 2 Points
Label: Two things make up crust

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	48.2	21.5	12.1	13.4	4.9	69.6	48.2	41.7	53.7
	2015	574	37.7	27.8	16.3	13.7	4.4	65.6	37.7	34.4	41.4
Turkey	2011	1070	15.7	20.1	51.1	11.2	1.8	35.9	15.7	17.3	14.3
	2015	924	29.7	35.0	22.8	10.3	2.1	64.8	29.7	28.3	31.1
United Arab Emirates	2011	2091	16.8	12.4	46.0	21.9	2.9	29.2	16.8	16.4	17.2
	2015	3032	17.1	15.9	45.8	18.7	2.4	33.0	17.1	17.1	17.2
United States	2011	1776	39.2	28.8	24.7	3.6	3.7	68.0	39.2	35.8	43.0
	2015	1434	40.5	27.8	23.8	3.6	4.2	68.3	40.5	39.0	42.1

International Avg (n=40)	2011	30339	26.7	20.1	30.6	19.4	3.1	46.8	26.7	25.7	27.8
	2015	30664	28.1	20.5	29.4	18.4	3.7	48.6	28.1	26.7	29.4

Ontario, Canada	2011	657	35.8	28.4	22.4	7.5	6.0	64.1	35.8	37.7	34.0
	2015	662	29.7	31.6	20.9	11.1	6.6	61.4	29.7	27.3	31.9
Quebec, Canada	2011	610	25.3	23.4	32.0	17.0	2.3	48.7	25.3	21.1	29.4
	2015	404	25.2	33.4	28.1	10.4	2.9	58.5	25.2	28.9	21.3
Norway (4)	2011	440	47.9	25.4	8.6	11.7	6.5	73.2	47.9	46.8	48.9
	2015	594	41.9	22.2	13.2	14.7	8.0	64.1	41.9	36.3	46.6
Abu Dhabi, UAE	2011	589	12.8	12.1	49.9	22.1	3.2	24.8	12.8	14.7	10.9
	2015	717	12.7	14.2	51.3	19.2	2.6	26.9	12.7	12.5	12.9
Dubai, UAE	2011	870	27.8	14.7	35.5	19.9	2.2	42.5	27.8	23.8	31.2
	2015	1063	27.7	22.4	35.5	12.6	1.7	50.2	27.7	28.1	27.3
Florida, US	2011	370	41.3	28.8	22.3	4.3	3.4	70.1	41.3	34.4	48.0
	2015	282	35.5	27.9	29.9	3.3	3.3	63.5	35.5	36.4	34.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S07_14 (S041102): Earth Science / Applying Type: MC Key: C
Label: In which place will it snow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	885	63.7	14.5	13.4	63.7	2.5	2.7	3.2	59.5	67.5
	2015	868	66.2	8.1	14.1	66.2	4.2	2.6	4.7	66.2	66.2
Bahrain	2011	570	37.4	35.4	13.9	37.4	5.6	2.5	5.1	40.4	34.4
	2015	592	39.8	29.5	15.0	39.8	4.2	6.8	4.7	42.7	36.9
Belgium (Flemish)	2011	682	83.0	2.4	6.9	83.0	1.3	2.7	3.9	81.3	84.7
	2015	767	86.5	1.8	5.0	86.5	1.0	3.4	2.4	86.9	86.1
Chile	2011	791	58.5	19.0	8.6	58.5	3.3	1.3	9.4	56.2	60.9
	2015	678	58.0	21.4	7.9	58.0	2.5	1.1	9.1	57.7	58.3
Chinese Taipei	2011	609	64.7	4.6	27.3	64.7	2.1	0.8	0.5	60.7	68.1
	2015	616	68.0	4.1	24.0	68.0	2.3	0.8	0.9	62.1	73.6
Croatia	2011	650	80.2	6.4	7.9	80.2	1.8	1.5	2.2	79.0	81.4
	2015	563	84.9	4.9	5.4	84.9	1.5	1.3	2.0	87.8	81.8
Czech Republic	2011	646	83.8	3.9	4.1	83.8	1.3	3.0	4.0	84.8	83.0
	2015	747	81.4	5.4	3.9	81.4	2.9	2.7	3.7	81.9	80.8
Denmark	2011	562	77.2	4.7	6.6	77.2	1.8	4.8	4.9	74.8	79.9
	2015	528	73.0	5.5	7.4	73.0	1.2	3.9	9.0	70.2	75.4
England	2011	496	71.9	7.6	11.0	71.9	2.2	3.4	3.8	70.5	73.2
	2015	574	72.9	6.5	12.9	72.9	2.5	2.5	2.6	71.4	74.4
Finland	2011	667	85.4	6.3	4.9	85.4	0.8	1.8	0.9	84.6	86.1
	2015	718	84.5	4.7	4.6	84.5	2.3	1.3	2.5	88.2	81.0
Georgia	2011	683	44.8	16.6	17.0	44.8	9.0	2.7	9.8	45.0	44.6
	2015	563	47.5	15.4	14.3	47.5	9.4	1.3	12.1	45.3	49.6
Germany	2011	567	69.1	5.1	6.5	69.1	10.6	5.5	3.2	65.0	72.9
	2015	569	61.1	5.7	7.9	61.1	9.9	8.5	6.9	62.7	59.6
Hong Kong SAR	2011	563	67.4	3.6	27.3	67.4	1.1	0.2	0.4	59.4	73.6
	2015	513	75.5	1.3	20.4	75.5	0.9	0.8	1.0	71.1	79.2
Hungary	2011	752	73.2	5.9	7.9	73.2	2.7	4.6	5.7	73.0	73.4
	2015	713	73.3	4.8	6.8	73.3	2.7	5.1	7.4	71.0	75.4
Iran, Islamic Rep. of	2011	819	34.7	36.8	11.4	34.7	5.5	3.5	8.1	30.3	39.0
	2015	546	29.6	38.6	13.5	29.6	6.9	4.6	6.7	27.8	31.6
Ireland	2011	660	73.1	10.5	9.8	73.1	2.6	1.4	2.7	73.4	72.7
	2015	621	77.6	5.7	8.0	77.6	2.4	1.9	4.4	75.9	79.1
Italy	2011	598	74.3	10.5	6.6	74.3	1.4	2.9	4.4	72.6	76.2
	2015	613	68.7	10.6	8.8	68.7	2.9	4.5	4.5	65.5	71.4
Japan	2011	624	81.8	4.2	9.5	81.8	0.2	1.5	2.8	82.0	81.7
	2015	621	85.5	3.7	6.3	85.5	0.7	1.5	2.2	83.5	87.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_14 (S041102): Earth Science / Applying Type: MC Key: C
Label: In which place will it snow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	626	56.4	14.9	16.5	56.4	5.3	0.9	6.0	50.2	62.0
	2015	668	67.6	12.6	11.3	67.6	6.7	0.4	1.4	71.4	64.1
Korea, Rep. of	2011	614	82.3	3.7	12.0	82.3	1.6	0.3	0.2	79.8	84.8
	2015	666	78.8	3.8	15.3	78.8	1.0	0.7	0.4	74.6	83.0
Kuwait	2011	584	30.7	22.6	23.2	30.7	9.7	7.1	6.8	33.9	26.7
	2015	501	30.1	23.5	17.0	30.1	9.9	6.6	12.9	31.9	28.2
Lithuania	2011	657	69.6	10.2	12.0	69.6	2.6	2.8	2.8	66.2	72.4
	2015	655	77.3	8.0	9.0	77.3	2.5	1.0	2.3	75.1	79.5
Morocco	2011	1013	28.9	22.7	24.1	28.9	7.8	3.0	13.4	27.4	30.6
	2015	707	37.9	17.8	19.6	37.9	9.9	6.7	8.2	38.7	37.1
Netherlands	2011	459	85.7	4.8	4.3	85.7	1.5	1.3	2.3	85.1	86.3
	2015	634	80.7	2.6	8.9	80.7	1.9	2.4	3.6	81.1	80.2
New Zealand	2011	800	60.7	15.8	12.0	60.7	5.4	2.9	3.1	58.8	62.6
	2015	913	61.7	13.7	11.7	61.7	3.6	3.6	5.8	60.4	62.9
Northern Ireland	2011	499	80.2	6.2	9.6	80.2	1.6	1.1	1.2	78.8	81.4
	2015	430	81.2	5.2	10.3	81.2	1.8	1.4	0.0	79.9	82.7
Oman	2011	1481	34.7	29.4	16.4	34.7	9.3	3.7	6.4	36.6	33.0
	2015	1292	42.3	30.9	13.5	42.3	8.7	2.0	2.5	43.8	40.9
Portugal	2011	592	74.8	12.2	4.3	74.8	2.7	1.3	4.6	73.3	76.0
	2015	672	68.1	10.6	6.2	68.1	2.7	4.3	8.1	63.5	73.1
Qatar	2011	585	45.5	25.8	16.9	45.5	6.8	2.3	2.8	46.4	44.6
	2015	743	45.7	21.8	17.9	45.7	6.8	2.0	5.9	43.0	48.4
Russian Federation	2011	645	67.2	7.1	17.6	67.2	2.4	1.8	3.9	66.8	67.6
	2015	702	73.3	3.1	16.1	73.3	2.3	1.8	3.5	74.9	71.7
Saudi Arabia	2011	649	33.8	36.7	15.2	33.8	8.4	2.1	3.8	35.1	32.5
	2015	616	39.9	28.9	16.0	39.9	7.9	1.7	5.6	39.8	39.9
Serbia	2011	631	64.0	4.6	16.3	64.0	3.9	4.1	7.2	65.1	63.0
	2015	566	71.5	4.6	12.8	71.5	0.9	3.5	6.7	74.1	68.9
Singapore	2011	915	57.9	6.3	31.1	57.9	4.2	0.0	0.6	53.4	62.2
	2015	936	62.6	7.8	25.0	62.6	3.3	0.6	0.7	61.6	63.6
Slovak Republic	2011	814	71.5	6.4	13.4	71.5	4.0	1.7	2.8	71.7	71.4
	2015	831	78.3	5.5	7.9	78.3	3.1	2.0	3.3	74.1	82.3
Slovenia	2011	629	74.8	9.2	9.9	74.8	1.3	1.6	3.2	76.8	72.9
	2015	643	78.0	7.2	6.7	78.0	0.5	3.5	4.1	77.7	78.4
Spain	2011	602	67.7	15.0	4.6	67.7	2.7	4.1	6.0	65.1	70.2
	2015	1090	73.9	10.8	4.4	73.9	2.3	3.5	5.2	72.9	74.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S07_14 (S041102): Earth Science / Applying Type: MC Key: C
Label: In which place will it snow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	632	77.1	4.5	9.7	77.1	1.7	1.9	5.1	77.1	77.1
	2015	574	69.0	5.7	10.3	69.0	0.2	8.7	6.0	73.0	65.3
Turkey	2011	1069	45.7	17.1	21.0	45.7	13.2	0.5	2.5	44.3	47.1
	2015	923	57.4	16.5	15.1	57.4	7.5	1.1	2.3	53.7	61.0
United Arab Emirates	2011	2091	41.6	28.4	15.7	41.6	7.7	2.6	4.0	41.5	41.6
	2015	3032	52.2	21.2	16.8	52.2	4.2	2.5	3.1	51.8	52.5
United States	2011	1776	69.5	11.8	10.4	69.5	2.2	1.5	4.5	67.3	72.0
	2015	1434	67.5	11.2	11.7	67.5	2.7	2.4	4.5	64.0	71.1

International Avg (n=40)	2011	30187	63.6	12.8	12.9	63.6	4.0	2.4	4.2	62.3	64.8
	2015	30638	65.7	11.3	11.7	65.7	3.8	2.9	4.6	65.0	66.4

Ontario, Canada	2011	657	74.6	7.3	7.8	74.6	1.6	1.9	6.8	70.4	78.7
	2015	657	72.1	7.0	8.2	72.1	2.4	2.2	8.1	74.2	69.9
Quebec, Canada	2011	610	72.8	6.7	9.6	72.8	3.4	4.1	3.4	73.8	71.8
	2015	389	82.0	7.4	3.4	82.0	2.2	1.1	3.9	78.0	86.5
Norway (4)	2011	440	72.3	5.3	7.8	72.3	1.9	4.8	7.9	75.5	69.4
	2015	594	65.9	6.2	11.2	65.9	2.6	4.5	9.6	68.0	64.1
Abu Dhabi, UAE	2011	589	38.3	30.1	16.9	38.3	8.0	2.6	4.1	41.3	35.5
	2015	717	44.5	24.6	19.1	44.5	5.8	2.7	3.3	43.7	45.1
Dubai, UAE	2011	870	50.4	20.7	16.1	50.4	7.2	2.2	3.3	44.1	55.8
	2015	1063	63.9	13.9	16.5	63.9	2.4	1.3	2.1	62.9	64.9
Florida, US	2011	370	64.8	12.5	16.4	64.8	1.3	0.5	4.5	60.1	69.3
	2015	282	63.3	10.9	15.2	63.3	4.5	2.8	3.3	61.3	65.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_01 (S051044): Life Science / Knowing Type: CR 1 Point
Label: Tree and bird; glass and spoon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	43.0	53.2	3.8	0.0	43.0	47.2	39.3
	2015	859	52.3	44.2	3.4	0.1	52.3	56.4	47.9
Bahrain	2011	585	52.2	40.9	6.8	0.1	52.2	55.8	48.7
	2015	593	51.6	45.7	2.7	0.0	51.6	56.8	46.8
Belgium (Flemish)	2011	685	38.3	59.9	1.7	0.0	38.3	36.4	39.9
	2015	777	39.5	57.6	2.7	0.2	39.5	41.1	37.9
Chile	2011	796	40.5	50.9	8.0	0.6	40.5	39.8	41.2
	2015	666	38.0	51.2	10.0	0.9	38.0	41.8	34.6
Chinese Taipei	2011	615	49.4	46.8	3.7	0.0	49.4	54.9	44.7
	2015	614	16.2	79.0	4.8	0.0	16.2	16.1	16.3
Croatia	2011	646	60.1	36.2	3.7	0.0	60.1	63.9	56.2
	2015	564	65.0	32.4	2.6	0.0	65.0	66.0	64.1
Czech Republic	2011	653	59.6	34.2	6.2	0.0	59.6	57.4	61.7
	2015	742	57.1	34.9	8.0	0.1	57.1	59.8	54.5
Denmark	2011	564	33.9	59.5	6.1	0.5	33.9	36.1	31.6
	2015	526	32.0	62.2	5.4	0.4	32.0	35.0	29.0
England	2011	470	39.3	57.5	3.2	0.0	39.3	41.1	37.6
	2015	570	49.1	48.4	2.5	0.0	49.1	50.2	47.9
Finland	2011	664	44.5	49.7	5.8	0.0	44.5	50.0	39.7
	2015	703	46.2	45.0	8.7	0.1	46.2	53.6	39.6
Georgia	2011	690	40.7	47.8	11.3	0.3	40.7	44.4	37.5
	2015	563	36.0	50.2	13.3	0.6	36.0	36.6	35.3
Germany	2011	573	40.2	53.4	6.4	0.0	40.2	41.6	38.8
	2015	561	40.3	51.3	8.4	0.0	40.3	41.4	39.2
Hong Kong SAR	2011	566	31.3	66.8	1.7	0.2	31.3	36.4	26.6
	2015	517	30.8	67.9	1.3	0.0	30.8	32.7	28.9
Hungary	2011	742	47.9	45.2	6.9	0.1	47.9	49.5	46.5
	2015	725	43.0	51.1	5.4	0.5	43.0	42.9	43.1
Iran, Islamic Rep. of	2011	829	76.9	15.5	7.4	0.2	76.9	77.6	76.2
	2015	545	59.6	29.4	10.8	0.2	59.6	63.4	56.1
Ireland	2011	655	59.6	38.2	2.2	0.0	59.6	61.6	57.9
	2015	623	35.5	63.0	1.5	0.0	35.5	39.2	32.3
Italy	2011	602	65.7	30.1	4.3	0.0	65.7	68.4	63.2
	2015	640	65.0	28.9	6.1	0.0	65.0	67.9	62.1
Japan	2011	630	43.8	53.5	2.3	0.3	43.8	45.2	42.7
	2015	633	37.4	59.2	3.1	0.3	37.4	36.6	38.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_01 (S051044): Life Science / Knowing Type: CR 1 Point
Label: Tree and bird; glass and spoon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	623	56.5	38.4	4.8	0.4	56.5	61.7	52.0
	2015	675	74.3	21.8	3.7	0.2	74.3	78.9	69.9
Korea, Rep. of	2011	616	33.6	65.9	0.5	0.0	33.6	33.6	33.7
	2015	665	41.5	57.5	0.9	0.0	41.5	47.4	35.8
Kuwait	2011	589	24.2	47.3	27.7	0.8	24.2	28.6	18.7
	2015	505	27.5	37.6	34.1	0.7	27.5	28.0	26.2
Lithuania	2011	681	50.0	46.1	3.9	0.0	50.0	55.2	45.3
	2015	652	51.9	44.2	3.9	0.0	51.9	54.6	49.1
Morocco	2011	1110	16.6	47.1	35.4	0.9	16.6	18.9	14.6
	2015	713	30.9	54.2	14.4	0.5	30.9	30.5	31.2
Netherlands	2011	471	41.6	57.6	0.6	0.2	41.6	39.6	43.6
	2015	642	44.7	54.2	0.9	0.2	44.7	46.1	43.8
New Zealand	2011	799	42.6	54.6	2.7	0.1	42.6	46.2	39.2
	2015	898	44.1	51.4	4.3	0.2	44.1	50.0	38.7
Northern Ireland	2011	503	38.0	55.7	6.2	0.0	38.0	40.4	35.9
	2015	448	47.1	50.9	2.0	0.0	47.1	49.6	44.6
Oman	2011	1476	43.6	39.4	16.5	0.5	43.6	46.9	40.5
	2015	1289	53.0	36.1	10.8	0.1	53.0	60.3	45.6
Portugal	2011	574	53.6	44.1	2.2	0.1	53.6	54.4	52.9
	2015	667	50.8	47.1	2.0	0.0	50.8	52.9	48.9
Qatar	2011	586	38.6	51.9	9.5	0.1	38.6	42.9	34.8
	2015	744	49.7	43.2	6.8	0.4	49.7	52.4	46.8
Russian Federation	2011	645	56.2	39.2	4.6	0.0	56.2	57.5	55.0
	2015	694	66.3	30.9	2.8	0.0	66.3	69.1	63.5
Saudi Arabia	2011	657	43.2	45.8	11.0	0.0	43.2	53.2	32.7
	2015	634	37.2	45.1	17.4	0.4	37.2	48.7	26.2
Serbia	2011	622	79.6	14.1	6.2	0.1	79.6	81.2	78.2
	2015	572	64.2	30.4	5.2	0.3	64.2	71.3	57.4
Singapore	2011	909	84.6	15.1	0.2	0.0	84.6	85.5	83.9
	2015	923	87.4	12.1	0.4	0.0	87.4	89.3	85.8
Slovak Republic	2011	805	57.9	37.3	4.7	0.1	57.9	57.8	58.1
	2015	819	65.2	29.8	4.6	0.3	65.2	65.9	64.6
Slovenia	2011	628	59.3	37.3	3.4	0.0	59.3	58.3	60.1
	2015	640	62.8	34.6	2.4	0.2	62.8	62.9	62.7
Spain	2011	602	43.0	51.1	5.9	0.0	43.0	44.7	41.4
	2015	1121	46.1	51.5	2.1	0.3	46.1	46.4	45.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_01 (S051044): Life Science / Knowing Type: CR 1 Point
Label: Tree and bird; glass and spoon

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	39.9	53.2	6.5	0.5	39.9	42.9	36.9
	2015	592	31.6	64.2	4.2	0.0	31.6	31.1	32.0
Turkey	2011	1073	68.3	26.9	4.4	0.4	68.3	74.1	63.4
	2015	930	37.4	59.1	3.5	0.0	37.4	37.0	37.7
United Arab Emirates	2011	2105	40.0	49.2	10.6	0.2	40.0	45.4	34.6
	2015	3025	41.9	48.6	9.1	0.3	41.9	45.1	39.2
United States	2011	1797	44.8	53.7	1.5	0.0	44.8	47.2	42.6
	2015	1427	43.9	53.1	2.6	0.4	43.9	48.4	39.4

International Avg (n=40)	2011	30385	48.1	45.3	6.5	0.2	48.1	50.6	45.7
	2015	30696	47.4	46.5	6.0	0.2	47.4	50.1	44.7

Ontario, Canada	2011	645	51.7	46.4	1.9	0.0	51.7	56.5	47.0
	2015	657	37.5	59.3	2.9	0.3	37.5	39.5	35.5
Quebec, Canada	2011	599	48.3	45.4	6.0	0.3	48.3	51.9	44.7
	2015	398	45.0	52.5	2.4	0.1	45.0	49.8	40.4
Norway (4)	2011	455	28.7	64.1	7.1	0.0	28.7	30.9	26.0
	2015	595	28.0	68.0	3.9	0.1	28.0	29.1	27.0
Abu Dhabi, UAE	2011	602	36.3	52.9	10.4	0.4	36.3	39.9	32.5
	2015	712	32.1	53.8	13.2	0.9	32.1	34.4	30.1
Dubai, UAE	2011	870	45.3	46.7	8.0	0.0	45.3	47.2	43.8
	2015	1072	55.8	41.3	2.9	0.0	55.8	58.4	53.4
Florida, US	2011	393	46.8	50.3	2.9	0.0	46.8	50.1	43.9
	2015	285	42.4	56.4	1.1	0.0	42.4	44.0	40.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_03 (S051003): Life Science / Knowing Type: MC Key: D
Label: Leaves from two kinds of trees

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	61.3	9.1	8.0	20.7	61.3	0.8	0.0	62.9	60.0
	2015	859	57.0	11.7	8.7	20.3	57.0	2.1	0.3	56.0	58.0
Bahrain	2011	585	29.0	20.5	24.4	24.2	29.0	1.6	0.1	26.5	31.4
	2015	593	30.8	13.3	25.7	26.6	30.8	3.7	0.0	32.6	29.2
Belgium (Flemish)	2011	685	73.2	6.5	8.1	11.0	73.2	1.3	0.0	73.7	72.8
	2015	777	72.9	9.8	6.6	9.1	72.9	1.4	0.3	71.6	74.2
Chile	2011	796	45.4	13.0	15.3	23.4	45.4	2.1	0.9	44.8	46.2
	2015	666	45.7	16.0	16.2	18.7	45.7	2.4	1.0	42.3	48.7
Chinese Taipei	2011	615	47.9	13.1	21.5	16.6	47.9	1.0	0.0	46.8	48.8
	2015	614	46.1	11.6	22.7	18.4	46.1	1.2	0.0	46.6	45.7
Croatia	2011	646	78.7	5.4	4.0	11.1	78.7	0.8	0.0	80.1	77.3
	2015	564	76.5	6.3	4.8	9.5	76.5	2.6	0.4	78.7	74.3
Czech Republic	2011	653	74.9	8.8	8.4	6.3	74.9	1.7	0.0	74.8	74.9
	2015	742	80.0	6.7	5.9	4.8	80.0	1.8	0.8	78.0	81.9
Denmark	2011	564	72.3	8.3	7.5	8.6	72.3	2.6	0.6	73.0	71.7
	2015	526	69.0	6.8	9.4	11.1	69.0	2.4	1.3	70.4	67.5
England	2011	470	61.7	8.7	9.3	19.0	61.7	1.2	0.0	64.5	59.1
	2015	570	64.9	10.8	6.2	17.5	64.9	0.6	0.0	62.3	67.6
Finland	2011	664	75.6	8.4	10.0	5.3	75.6	0.7	0.0	84.9	67.4
	2015	703	77.3	5.1	6.1	5.2	77.3	6.1	0.1	79.6	75.3
Georgia	2011	691	60.5	6.6	12.7	16.6	60.5	2.9	0.8	59.6	61.2
	2015	563	62.1	9.0	8.6	15.5	62.1	3.1	1.7	60.9	63.2
Germany	2011	573	68.9	10.5	10.5	7.8	68.9	2.2	0.0	69.2	68.7
	2015	561	70.0	10.0	9.2	6.9	70.0	3.6	0.2	71.1	69.0
Hong Kong SAR	2011	566	47.7	12.7	18.1	20.4	47.7	1.0	0.2	50.7	45.1
	2015	517	54.6	11.6	12.9	20.2	54.6	0.6	0.0	57.9	51.4
Hungary	2011	743	72.5	7.1	9.9	9.1	72.5	1.2	0.1	74.5	70.8
	2015	725	73.2	6.6	9.5	5.9	73.2	3.5	1.3	71.8	74.8
Iran, Islamic Rep. of	2011	829	32.1	18.5	19.9	25.4	32.1	3.8	0.2	35.4	29.1
	2015	545	35.5	18.2	16.4	24.0	35.5	4.7	1.3	38.1	33.1
Ireland	2011	655	67.5	7.7	6.8	17.4	67.5	0.6	0.0	70.5	64.9
	2015	623	71.4	8.6	6.5	12.6	71.4	0.6	0.2	72.1	70.9
Italy	2011	602	67.7	9.1	8.1	12.6	67.7	2.5	0.0	67.5	67.9
	2015	641	62.9	13.0	11.6	10.2	62.9	2.2	0.0	59.8	66.0
Japan	2011	630	52.7	13.8	14.1	18.3	52.7	0.7	0.3	51.6	53.7
	2015	633	52.8	13.0	14.7	18.1	52.8	1.0	0.4	56.6	48.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_03 (S051003): Life Science / Knowing Type: MC Key: D
Label: Leaves from two kinds of trees

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	63.9	8.7	10.5	14.9	63.9	1.3	0.7	70.0	58.6
	2015	675	69.3	8.0	9.3	12.0	69.3	1.1	0.3	73.2	65.6
Korea, Rep. of	2011	616	59.9	5.5	18.0	16.4	59.9	0.1	0.0	66.1	54.7
	2015	665	72.6	4.8	14.0	8.5	72.6	0.1	0.0	77.3	68.0
Kuwait	2011	584	17.5	21.5	31.2	21.6	17.5	7.1	1.0	20.0	14.5
	2015	506	18.1	23.5	25.3	21.5	18.1	9.7	1.8	18.1	18.4
Lithuania	2011	681	67.8	12.1	7.3	10.3	67.8	2.4	0.1	68.5	67.1
	2015	652	69.3	9.6	10.1	9.4	69.3	1.5	0.0	72.7	65.8
Morocco	2011	963	23.7	19.9	27.7	28.3	23.7	0.3	0.0	28.0	20.0
	2015	712	29.5	17.9	24.1	25.0	29.5	2.8	0.7	33.1	26.4
Netherlands	2011	471	70.4	9.1	9.7	9.9	70.4	0.6	0.2	69.3	71.6
	2015	642	66.0	12.1	12.6	7.3	66.0	1.8	0.2	66.1	66.7
New Zealand	2011	799	55.8	10.6	8.3	24.0	55.8	1.1	0.2	60.0	52.0
	2015	898	60.8	10.0	9.8	17.3	60.8	1.8	0.2	67.3	54.8
Northern Ireland	2011	503	72.1	7.3	5.2	14.0	72.1	1.4	0.0	76.6	68.2
	2015	442	64.1	9.8	8.8	17.2	64.1	0.0	0.0	64.2	64.1
Oman	2011	1476	20.5	22.6	29.3	23.1	20.5	3.8	0.6	19.7	21.3
	2015	1285	25.2	18.1	28.8	24.6	25.2	3.1	0.2	28.1	22.3
Portugal	2011	574	50.2	12.1	10.7	23.4	50.2	3.5	0.1	47.4	52.8
	2015	667	47.8	13.9	12.9	23.4	47.8	1.6	0.3	48.0	47.6
Qatar	2011	586	29.5	18.1	24.7	26.3	29.5	1.3	0.1	32.9	26.5
	2015	744	30.2	21.7	20.5	24.0	30.2	3.2	0.4	29.3	31.1
Russian Federation	2011	645	76.9	5.7	10.1	5.7	76.9	1.6	0.0	74.3	79.5
	2015	694	78.7	5.0	9.9	4.8	78.7	1.4	0.2	81.4	75.9
Saudi Arabia	2011	656	27.9	21.9	27.8	21.0	27.9	1.3	0.1	27.7	28.2
	2015	632	16.1	24.5	30.0	25.9	16.1	3.1	0.4	16.2	16.0
Serbia	2011	622	82.5	2.5	6.2	5.8	82.5	2.8	0.1	86.7	79.0
	2015	572	78.4	6.3	5.3	6.3	78.4	2.7	1.0	80.6	76.3
Singapore	2011	909	54.1	10.5	13.3	21.8	54.1	0.2	0.0	54.0	54.3
	2015	923	55.3	11.9	12.9	19.4	55.3	0.4	0.1	57.8	53.1
Slovak Republic	2011	805	75.4	6.5	5.8	9.6	75.4	2.6	0.2	73.8	77.0
	2015	819	72.5	6.3	7.0	11.9	72.5	2.0	0.3	72.5	72.6
Slovenia	2011	627	75.6	5.1	4.5	13.4	75.6	1.5	0.0	75.3	75.8
	2015	640	76.8	5.1	6.5	9.2	76.8	2.1	0.2	79.7	74.2
Spain	2011	602	43.7	15.6	16.4	21.5	43.7	2.8	0.0	38.0	49.4
	2015	1121	53.5	11.6	14.1	19.2	53.5	1.2	0.3	55.2	51.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_03 (S051003): Life Science / Knowing Type: MC Key: D
Label: Leaves from two kinds of trees

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	71.7	8.9	9.7	7.5	71.7	1.6	0.5	72.5	70.9
	2015	592	69.6	11.9	7.4	9.1	69.6	1.8	0.2	67.5	71.5
Turkey	2011	1073	37.2	16.9	24.3	20.2	37.2	0.9	0.4	36.9	37.6
	2015	930	40.8	15.6	22.7	19.3	40.8	1.5	0.1	44.7	37.6
United Arab Emirates	2011	2105	29.7	19.3	21.8	26.3	29.7	2.6	0.3	30.3	29.2
	2015	3026	38.2	17.8	20.1	21.3	38.2	2.2	0.5	39.4	37.1
United States	2011	1797	71.5	8.0	8.2	11.1	71.5	1.1	0.1	71.3	71.7
	2015	1427	67.0	10.3	7.6	12.1	67.0	2.1	0.9	68.7	65.3

International Avg (n=40)	2011	30234	56.7	11.4	13.7	16.3	56.7	1.8	0.2	57.8	55.8
	2015	30686	57.6	11.6	13.0	15.1	57.6	2.3	0.4	58.7	56.5

Ontario, Canada	2011	645	76.5	6.2	5.8	10.4	76.5	0.9	0.2	77.2	75.8
	2015	656	75.1	8.1	5.8	9.0	75.1	1.4	0.6	78.1	72.1
Quebec, Canada	2011	599	77.5	4.3	4.3	11.4	77.5	1.9	0.5	79.7	75.4
	2015	397	78.4	5.4	7.1	8.7	78.4	0.4	0.1	79.8	77.0
Norway (4)	2011	455	72.1	6.6	4.4	13.4	72.1	3.4	0.1	73.3	70.5
	2015	595	65.1	7.7	7.1	16.3	65.1	3.8	0.1	68.6	61.5
Abu Dhabi, UAE	2011	602	27.0	17.6	21.0	30.6	27.0	3.4	0.5	27.4	26.6
	2015	713	33.3	18.9	20.3	23.9	33.3	2.0	1.5	33.7	33.0
Dubai, UAE	2011	870	35.3	20.1	19.3	22.8	35.3	2.0	0.3	36.7	34.2
	2015	1072	52.8	12.0	15.4	18.1	52.8	1.7	0.0	54.7	51.0
Florida, US	2011	393	67.2	8.5	10.4	12.2	67.2	1.5	0.2	66.5	67.8
	2015	285	66.5	6.8	12.9	12.6	66.5	0.8	0.4	63.9	69.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_04 (S051168): Life Science / Applying Type: CR 1 Point
Label: Why plastic objects dangerous

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	69.8	8.5	19.8	1.8	0.1	69.8	75.1	65.1
	2015	859	80.9	6.9	9.4	2.3	0.4	80.9	81.2	80.5
Bahrain	2011	585	29.5	13.2	43.7	13.4	0.1	29.5	32.1	27.0
	2015	593	26.9	16.1	45.7	10.7	0.6	26.9	26.6	27.3
Belgium (Flemish)	2011	685	70.5	5.4	22.3	1.7	0.0	70.5	74.8	67.1
	2015	777	60.4	19.8	16.1	3.5	0.3	60.4	64.2	56.2
Chile	2011	795	52.1	9.8	30.1	7.2	0.9	52.1	51.8	52.3
	2015	666	52.6	11.8	24.7	9.9	1.0	52.6	54.5	51.0
Chinese Taipei	2011	615	44.0	3.7	46.5	5.8	0.0	44.0	42.1	45.7
	2015	614	52.5	10.8	31.8	4.9	0.0	52.5	52.9	52.0
Croatia	2011	646	51.4	10.7	27.6	10.4	0.0	51.4	55.5	47.1
	2015	564	51.0	21.1	19.2	8.3	0.4	51.0	54.8	47.3
Czech Republic	2011	653	56.5	5.7	24.7	13.1	0.0	56.5	55.3	57.6
	2015	742	58.4	5.7	24.9	10.1	0.8	58.4	62.5	54.7
Denmark	2011	564	75.7	2.9	15.4	5.3	0.6	75.7	76.6	74.8
	2015	526	61.4	10.6	21.6	4.8	1.5	61.4	66.9	56.0
England	2011	470	72.3	6.0	19.0	2.7	0.0	72.3	73.8	71.0
	2015	570	71.3	2.3	25.1	1.2	0.2	71.3	76.4	65.7
Finland	2011	664	72.8	1.5	20.2	5.4	0.0	72.8	78.3	68.1
	2015	703	75.5	3.3	14.5	6.5	0.2	75.5	81.4	70.2
Georgia	2011	691	28.4	27.0	23.9	19.8	0.8	28.4	33.4	24.1
	2015	563	29.6	8.1	36.2	24.0	2.1	29.6	31.0	28.2
Germany	2011	573	72.5	3.4	16.8	7.1	0.2	72.5	75.2	69.8
	2015	561	67.9	7.6	15.9	7.5	1.0	67.9	69.4	66.5
Hong Kong SAR	2011	566	41.7	3.6	47.2	7.3	0.2	41.7	49.0	35.3
	2015	517	58.7	1.4	36.7	3.2	0.0	58.7	58.4	59.0
Hungary	2011	743	49.5	7.6	36.1	6.7	0.1	49.5	49.6	49.4
	2015	725	59.0	3.6	31.6	4.2	1.7	59.0	61.3	56.4
Iran, Islamic Rep. of	2011	829	23.1	6.4	49.2	21.0	0.2	23.1	23.5	22.8
	2015	545	14.3	4.2	57.0	22.7	1.8	14.3	14.2	14.4
Ireland	2011	655	79.5	7.3	11.0	2.2	0.0	79.5	81.1	78.2
	2015	623	80.9	4.1	13.7	1.1	0.2	80.9	82.8	79.3
Italy	2011	602	57.8	10.6	22.9	8.6	0.0	57.8	58.7	57.0
	2015	640	53.6	6.4	30.6	9.4	0.0	53.6	55.3	51.8
Japan	2011	630	62.3	2.2	31.7	3.5	0.3	62.3	63.2	61.4
	2015	633	73.8	0.7	20.0	5.2	0.4	73.8	76.1	71.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_04 (S051168): Life Science / Applying Type: CR 1 Point
Label: Why plastic objects dangerous

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	623	28.4	14.0	46.0	10.9	0.8	28.4	31.8	25.4
	2015	675	34.3	5.9	52.1	6.7	1.0	34.3	36.3	32.3
Korea, Rep. of	2011	616	83.8	1.1	13.1	1.9	0.0	83.8	83.7	83.9
	2015	665	61.8	0.9	35.5	1.7	0.0	61.8	61.8	61.8
Kuwait	2011	589	4.1	6.8	45.7	42.1	1.3	4.1	6.4	1.2
	2015	506	11.9	8.1	31.7	45.7	2.6	11.9	12.6	11.2
Lithuania	2011	681	54.1	3.3	32.5	9.9	0.1	54.1	50.5	57.4
	2015	652	62.5	2.6	26.2	8.7	0.0	62.5	65.9	58.9
Morocco	2011	1111	3.4	7.0	40.9	47.6	1.0	3.4	3.4	3.4
	2015	712	2.8	12.6	58.5	25.2	1.0	2.8	2.2	3.3
Netherlands	2011	471	70.8	7.1	21.0	0.8	0.2	70.8	77.2	64.6
	2015	642	85.1	3.7	10.3	0.7	0.2	85.1	88.3	81.5
New Zealand	2011	799	76.1	7.6	12.7	3.3	0.2	76.1	77.8	74.5
	2015	898	71.9	5.8	17.2	4.7	0.4	71.9	79.4	65.0
Northern Ireland	2011	503	69.6	6.2	19.0	5.1	0.0	69.6	71.3	68.2
	2015	448	70.2	5.5	21.9	2.5	0.0	70.2	70.7	69.7
Oman	2011	1476	14.6	14.2	40.0	30.5	0.8	14.6	18.0	11.3
	2015	1287	21.7	15.4	45.8	17.0	0.2	21.7	26.4	16.9
Portugal	2011	574	66.6	8.9	19.9	4.4	0.1	66.6	67.4	65.9
	2015	667	64.9	8.6	19.7	6.4	0.3	64.9	64.8	65.1
Qatar	2011	586	26.4	6.0	50.6	16.8	0.2	26.4	26.7	26.2
	2015	744	28.9	10.5	46.6	13.5	0.4	28.9	32.9	24.8
Russian Federation	2011	645	65.1	3.0	22.6	9.3	0.0	65.1	63.5	66.6
	2015	694	70.4	1.5	22.7	5.2	0.2	70.4	74.5	66.3
Saudi Arabia	2011	657	15.8	7.3	57.2	19.6	0.1	15.8	18.6	12.9
	2015	634	12.1	3.6	51.2	32.6	0.5	12.1	18.5	6.0
Serbia	2011	622	45.9	5.7	34.6	13.6	0.2	45.9	48.0	44.1
	2015	572	51.2	1.4	31.0	15.4	1.0	51.2	54.0	48.6
Singapore	2011	909	85.8	6.2	6.8	1.1	0.0	85.8	86.3	85.3
	2015	923	80.9	2.9	15.2	0.8	0.1	80.9	82.8	79.0
Slovak Republic	2011	805	50.2	11.6	28.8	9.3	0.2	50.2	51.8	48.6
	2015	819	52.2	6.2	29.5	11.6	0.4	52.2	56.6	48.1
Slovenia	2011	628	48.1	7.9	32.5	11.5	0.0	48.1	49.5	46.8
	2015	640	61.9	4.2	27.8	5.8	0.4	61.9	62.8	61.0
Spain	2011	602	59.2	6.9	26.3	7.6	0.0	59.2	57.8	60.6
	2015	1121	69.5	7.3	18.7	4.1	0.3	69.5	68.8	70.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_04 (S051168): Life Science / Applying Type: CR 1 Point
Label: Why plastic objects dangerous

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	74.9	3.0	14.0	7.6	0.5	74.9	80.3	69.6
	2015	592	73.8	3.7	18.3	3.7	0.5	73.8	77.7	70.1
Turkey	2011	1073	18.6	16.1	54.8	10.0	0.4	18.6	19.8	17.6
	2015	930	33.2	22.5	37.9	6.3	0.1	33.2	32.3	34.0
United Arab Emirates	2011	2105	33.2	8.4	39.4	18.6	0.4	33.2	36.0	30.4
	2015	3026	40.8	9.5	32.6	16.6	0.6	40.8	44.3	37.7
United States	2011	1797	79.5	6.9	12.3	1.3	0.1	79.5	79.6	79.4
	2015	1427	81.2	5.1	10.2	2.2	1.3	81.2	84.7	77.7

International Avg (n=40)	2011	30387	52.1	7.5	29.5	10.6	0.3	52.1	53.9	50.4
	2015	30695	54.3	7.3	28.4	9.4	0.6	54.3	56.7	51.9

Ontario, Canada	2011	645	76.3	4.8	16.5	2.0	0.3	76.3	79.2	73.4
	2015	657	74.5	5.7	16.2	2.6	1.1	74.5	77.5	71.4
Quebec, Canada	2011	599	62.6	5.4	26.9	4.6	0.5	62.6	67.0	58.2
	2015	398	65.1	17.2	14.4	3.1	0.1	65.1	69.4	61.1
Norway (4)	2011	455	62.9	3.5	24.8	8.7	0.1	62.9	62.7	63.1
	2015	595	68.8	5.0	18.3	7.6	0.3	68.8	71.0	66.6
Abu Dhabi, UAE	2011	602	32.6	8.6	40.3	17.8	0.6	32.6	36.7	28.3
	2015	713	36.4	8.0	35.1	19.0	1.5	36.4	41.7	31.9
Dubai, UAE	2011	870	44.6	4.6	35.9	14.6	0.4	44.6	44.5	44.6
	2015	1072	57.6	10.3	24.7	7.2	0.1	57.6	61.4	54.1
Florida, US	2011	393	76.5	8.5	12.4	2.3	0.2	76.5	75.8	77.3
	2015	285	81.6	4.0	12.9	1.1	0.4	81.6	87.6	75.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_05 (S051010): Life Science / Reasoning Type: CR 1 Point
Label: Middle tree did not grow as well

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	63.0	7.4	26.3	3.3	0.1	63.0	65.0	61.2
	2015	859	59.5	11.3	25.0	3.7	0.5	59.5	61.0	57.8
Bahrain	2011	585	41.2	2.6	44.9	10.4	1.0	41.2	45.9	36.6
	2015	593	37.1	4.4	49.7	8.1	0.6	37.1	41.2	33.3
Belgium (Flemish)	2011	685	61.6	5.2	31.5	1.7	0.1	61.6	63.0	60.4
	2015	777	62.0	9.0	24.3	3.9	0.7	62.0	63.0	60.9
Chile	2011	796	26.2	4.5	60.7	7.7	1.0	26.2	26.5	25.9
	2015	666	29.7	6.0	51.7	11.3	1.3	29.7	27.9	31.3
Chinese Taipei	2011	615	34.9	12.2	49.5	3.5	0.0	34.9	34.4	35.3
	2015	614	66.3	9.1	21.4	3.1	0.0	66.3	69.4	63.3
Croatia	2011	646	41.8	11.0	41.0	6.1	0.0	41.8	47.1	36.4
	2015	564	52.6	11.0	29.8	6.1	0.6	52.6	52.0	53.2
Czech Republic	2011	653	50.6	12.7	26.5	10.2	0.0	50.6	44.7	56.2
	2015	742	53.5	12.5	24.6	8.4	1.0	53.5	48.8	57.8
Denmark	2011	564	68.5	5.5	18.5	6.9	0.6	68.5	69.4	67.5
	2015	526	62.4	6.3	24.2	5.5	1.7	62.4	60.7	64.1
England	2011	470	60.4	12.6	23.8	3.2	0.0	60.4	58.6	62.1
	2015	570	60.4	12.6	25.2	1.5	0.2	60.4	63.7	57.0
Finland	2011	664	75.9	8.7	11.5	3.8	0.0	75.9	79.8	72.5
	2015	703	66.8	15.7	14.1	2.9	0.6	66.8	67.6	66.0
Georgia	2011	689	30.2	13.7	36.6	18.7	0.9	30.2	29.1	31.1
	2015	563	31.5	7.5	41.8	16.2	3.0	31.5	32.6	30.4
Germany	2011	573	63.3	7.8	20.4	8.3	0.2	63.3	61.3	65.4
	2015	561	58.1	10.0	21.2	9.6	1.0	58.1	54.5	61.2
Hong Kong SAR	2011	566	54.5	8.4	31.2	5.8	0.2	54.5	61.5	48.2
	2015	517	51.5	11.8	32.5	4.0	0.2	51.5	50.6	52.5
Hungary	2011	743	58.8	2.4	34.7	3.9	0.2	58.8	60.5	57.4
	2015	725	57.8	5.6	31.6	3.0	2.0	57.8	51.4	64.8
Iran, Islamic Rep. of	2011	829	32.7	2.5	46.3	18.3	0.2	32.7	31.9	33.4
	2015	545	30.7	0.6	45.2	21.4	2.1	30.7	35.5	26.4
Ireland	2011	655	54.6	8.1	34.2	3.1	0.0	54.6	53.6	55.5
	2015	623	54.2	15.6	27.9	2.1	0.2	54.2	54.4	54.0
Italy	2011	602	47.7	4.7	39.3	8.3	0.0	47.7	48.0	47.4
	2015	640	47.2	5.9	37.0	10.0	0.0	47.2	46.8	47.6
Japan	2011	630	79.6	5.2	13.3	1.6	0.3	79.6	79.5	79.7
	2015	633	72.1	8.6	15.7	3.1	0.4	72.1	71.7	72.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_05 (S051010): Life Science / Reasoning Type: CR 1 Point
Label: Middle tree did not grow as well

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	623	43.1	8.7	38.1	9.4	0.8	43.1	44.7	41.7
	2015	675	53.3	2.5	37.5	5.7	1.0	53.3	51.1	55.5
Korea, Rep. of	2011	616	83.8	4.0	11.7	0.5	0.0	83.8	83.5	84.0
	2015	665	78.3	6.9	13.9	0.9	0.0	78.3	78.4	78.1
Kuwait	2011	589	19.6	0.5	47.8	29.5	2.6	19.6	24.7	13.3
	2015	506	16.1	2.1	39.0	40.0	2.8	16.1	16.0	16.3
Lithuania	2011	681	57.3	5.9	33.2	3.4	0.1	57.3	58.7	56.1
	2015	652	54.0	13.9	27.1	4.9	0.1	54.0	59.5	48.1
Morocco	2011	1111	3.7	1.2	50.4	42.5	2.1	3.7	5.8	1.9
	2015	713	3.3	0.8	68.9	25.4	1.6	3.3	3.8	2.8
Netherlands	2011	471	60.0	6.7	31.5	1.7	0.2	60.0	55.9	64.0
	2015	642	60.1	7.2	29.4	3.1	0.2	60.1	58.6	61.3
New Zealand	2011	799	55.6	5.7	34.8	3.7	0.2	55.6	56.7	54.5
	2015	898	48.7	10.8	32.5	7.4	0.5	48.7	52.3	45.5
Northern Ireland	2011	503	54.2	11.0	28.3	6.3	0.1	54.2	57.3	51.5
	2015	448	55.5	14.0	28.5	1.7	0.3	55.5	58.8	52.4
Oman	2011	1476	19.8	1.6	50.4	27.0	1.2	19.8	24.5	15.4
	2015	1288	28.9	2.8	52.3	15.8	0.2	28.9	32.6	25.1
Portugal	2011	574	37.9	6.7	49.0	6.2	0.1	37.9	36.0	39.6
	2015	667	36.2	9.5	47.6	6.0	0.7	36.2	39.1	33.5
Qatar	2011	586	30.0	2.5	53.2	14.1	0.2	30.0	29.2	30.7
	2015	744	36.6	2.9	48.9	11.2	0.4	36.6	42.2	30.7
Russian Federation	2011	645	52.5	9.5	32.5	5.5	0.0	52.5	53.1	51.9
	2015	694	61.6	10.2	24.3	3.8	0.2	61.6	64.8	58.3
Saudi Arabia	2011	657	32.8	0.8	50.5	15.7	0.1	32.8	37.1	28.4
	2015	634	20.9	0.6	50.5	26.6	1.4	20.9	31.5	10.8
Serbia	2011	622	44.5	10.3	38.3	6.7	0.2	44.5	44.8	44.3
	2015	572	43.5	8.5	38.1	8.8	1.1	43.5	46.0	41.1
Singapore	2011	909	79.2	5.5	14.2	1.1	0.0	79.2	81.3	77.3
	2015	923	75.3	6.2	17.3	1.0	0.1	75.3	76.2	74.6
Slovak Republic	2011	805	39.3	11.6	41.1	7.8	0.2	39.3	39.9	38.8
	2015	819	48.0	11.9	31.8	7.5	0.7	48.0	45.4	50.6
Slovenia	2011	628	43.1	12.0	38.5	6.4	0.0	43.1	42.8	43.5
	2015	640	55.1	8.4	28.7	7.3	0.4	55.1	52.6	57.5
Spain	2011	602	38.9	5.6	45.6	9.8	0.0	38.9	40.8	37.1
	2015	1121	44.5	6.7	41.6	6.8	0.4	44.5	43.1	45.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_05 (S051010): Life Science / Reasoning Type: CR 1 Point
Label: Middle tree did not grow as well

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	67.3	5.6	19.8	6.8	0.5	67.3	69.5	65.2
	2015	592	62.8	10.9	19.2	6.5	0.5	62.8	62.5	63.2
Turkey	2011	1073	39.2	2.9	52.8	4.6	0.4	39.2	42.5	36.5
	2015	930	46.5	2.0	46.5	5.0	0.1	46.5	49.3	44.0
United Arab Emirates	2011	2105	36.1	2.7	45.3	15.5	0.5	36.1	40.2	31.9
	2015	3026	39.2	4.7	41.6	13.8	0.7	39.2	40.2	38.3
United States	2011	1797	56.5	5.1	36.5	1.7	0.2	56.5	58.2	55.0
	2015	1427	64.9	7.5	23.7	2.6	1.3	64.9	66.7	63.0

International Avg (n=40)	2011	30386	48.5	6.5	35.8	8.8	0.4	48.5	49.7	47.4
	2015	30697	49.7	7.9	33.3	8.4	0.8	49.7	50.6	48.8

Ontario, Canada	2011	645	70.2	7.4	19.9	1.7	0.7	70.2	71.6	68.7
	2015	657	58.4	10.0	26.9	3.7	1.1	58.4	59.3	57.5
Quebec, Canada	2011	599	59.4	12.5	24.0	3.6	0.5	59.4	55.1	63.5
	2015	398	51.8	15.4	27.0	5.4	0.3	51.8	55.9	48.0
Norway (4)	2011	455	52.3	4.5	34.8	8.3	0.1	52.3	54.5	49.5
	2015	595	59.4	5.4	27.0	7.8	0.3	59.4	61.2	57.5
Abu Dhabi, UAE	2011	602	30.8	2.1	52.4	14.0	0.6	30.8	34.8	26.6
	2015	713	28.7	3.9	47.1	18.8	1.5	28.7	31.1	26.8
Dubai, UAE	2011	870	44.2	3.1	38.5	13.6	0.7	44.2	44.7	43.8
	2015	1072	55.9	6.5	32.2	5.2	0.1	55.9	55.0	56.7
Florida, US	2011	393	51.3	4.0	42.2	2.2	0.2	51.3	52.0	50.7
	2015	285	65.6	7.7	23.0	3.3	0.4	65.6	68.5	62.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_06 (S051035): Life Science / Applying Type: MC Key: B
Label: Decrease air pollution in a city

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	33.0	5.2	33.0	42.0	18.5	1.2	0.1	37.6	29.0
	2015	859	25.9	6.4	25.9	42.6	21.8	2.8	0.7	25.2	26.6
Bahrain	2011	585	24.4	10.8	24.4	39.8	21.4	2.4	1.2	23.9	24.9
	2015	593	36.6	9.3	36.6	37.4	11.8	3.1	1.8	37.5	35.7
Belgium (Flemish)	2011	685	36.5	2.3	36.5	46.6	12.0	2.5	0.1	31.3	40.7
	2015	777	39.4	2.5	39.4	40.8	10.8	5.7	0.8	37.6	41.4
Chile	2011	796	20.7	4.6	20.7	63.9	7.4	2.2	1.1	18.6	23.1
	2015	666	15.7	5.4	15.7	62.7	9.7	4.8	1.7	15.8	15.5
Chinese Taipei	2011	615	73.3	1.2	73.3	20.8	3.6	1.0	0.0	75.6	71.3
	2015	614	83.9	0.6	83.9	10.4	2.3	2.8	0.0	84.2	83.7
Croatia	2011	646	29.8	2.2	29.8	48.1	18.0	1.9	0.0	29.7	29.8
	2015	564	31.1	1.6	31.1	47.2	16.3	3.2	0.6	31.5	30.8
Czech Republic	2011	653	27.3	4.4	27.3	44.6	22.2	1.2	0.3	21.4	32.8
	2015	742	28.5	4.8	28.5	46.1	17.6	1.7	1.3	26.1	30.7
Denmark	2011	564	32.2	7.2	32.2	36.1	19.3	4.3	0.9	33.5	30.8
	2015	526	18.1	6.7	18.1	48.1	20.5	4.0	2.6	14.0	22.1
England	2011	470	33.1	4.0	33.1	44.7	15.0	3.2	0.0	30.1	35.9
	2015	570	15.8	6.4	15.8	44.7	30.9	2.0	0.2	14.9	16.8
Finland	2011	664	40.0	1.1	40.0	37.5	19.0	2.4	0.0	42.5	37.7
	2015	703	38.0	0.4	38.0	34.0	22.8	4.1	0.6	37.9	38.2
Georgia	2011	689	38.9	16.6	38.9	18.1	23.5	2.0	0.9	41.3	36.8
	2015	563	34.5	13.0	34.5	21.6	24.1	3.7	3.1	35.6	33.4
Germany	2011	573	28.4	3.0	28.4	42.3	20.7	5.3	0.3	24.1	32.7
	2015	561	20.9	3.0	20.9	40.0	25.1	9.2	1.8	20.0	21.7
Hong Kong SAR	2011	566	41.5	3.3	41.5	45.0	9.6	0.3	0.3	39.2	43.5
	2015	517	50.8	2.7	50.8	34.7	10.7	0.8	0.2	43.1	58.6
Hungary	2011	743	31.0	4.1	31.0	50.3	12.0	2.3	0.3	30.4	31.5
	2015	725	24.7	2.9	24.7	52.6	13.7	3.7	2.3	20.7	29.1
Iran, Islamic Rep. of	2011	829	53.1	4.0	53.1	30.4	9.6	2.3	0.4	45.4	60.3
	2015	545	54.3	6.6	54.3	26.1	6.5	4.1	2.4	52.3	56.2
Ireland	2011	655	33.8	3.6	33.8	43.3	17.7	1.6	0.1	38.7	29.7
	2015	623	36.5	4.9	36.5	38.6	18.7	1.0	0.3	35.9	37.0
Italy	2011	602	41.6	2.9	41.6	39.8	13.8	1.8	0.0	38.4	44.5
	2015	641	28.0	3.5	28.0	48.2	15.1	5.1	0.0	26.5	29.6
Japan	2011	630	13.8	1.3	13.8	79.6	4.7	0.4	0.3	12.2	15.2
	2015	633	13.8	0.6	13.8	76.7	7.5	0.6	0.7	13.3	14.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_06 (S051035): Life Science / Applying Type: MC Key: B
Label: Decrease air pollution in a city

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	40.1	6.0	40.1	17.7	32.7	2.1	1.4	38.8	41.2
	2015	675	50.1	6.8	50.1	19.3	21.2	1.4	1.2	50.2	50.1
Korea, Rep. of	2011	616	81.2	1.2	81.2	16.3	0.8	0.4	0.2	82.8	79.8
	2015	665	66.5	1.2	66.5	30.3	1.5	0.5	0.0	68.6	64.5
Kuwait	2011	585	20.2	13.9	20.2	37.3	18.0	7.9	2.7	18.7	22.1
	2015	506	23.5	19.6	23.5	34.0	12.9	7.3	2.8	17.3	29.0
Lithuania	2011	681	30.8	1.9	30.8	46.2	18.3	2.6	0.1	30.6	31.0
	2015	652	25.4	2.6	25.4	51.9	17.5	2.4	0.1	22.6	28.5
Morocco	2011	982	29.8	16.0	29.8	33.4	20.7	0.2	0.0	30.7	28.9
	2015	713	32.1	12.7	32.1	32.4	18.3	2.7	1.8	34.8	29.8
Netherlands	2011	471	26.6	3.0	26.6	51.1	16.9	2.2	0.2	24.0	29.2
	2015	642	25.6	3.5	25.6	41.0	26.2	3.3	0.3	23.9	27.7
New Zealand	2011	799	26.7	6.8	26.7	46.7	17.8	1.6	0.4	23.5	29.6
	2015	898	26.4	7.4	26.4	41.3	18.3	5.2	1.3	23.8	28.9
Northern Ireland	2011	503	23.6	3.2	23.6	47.9	23.1	2.1	0.1	22.4	24.6
	2015	445	25.7	5.8	25.7	43.9	23.8	0.8	0.0	28.6	22.8
Oman	2011	1476	24.9	17.7	24.9	31.8	19.0	5.2	1.3	24.6	25.2
	2015	1288	25.9	15.3	25.9	34.3	20.5	3.8	0.2	25.2	26.5
Portugal	2011	574	32.6	1.3	32.6	57.4	4.9	3.7	0.1	29.8	35.2
	2015	667	21.5	2.5	21.5	63.2	6.9	4.8	1.1	19.0	23.9
Qatar	2011	586	25.9	17.2	25.9	35.9	19.1	1.6	0.3	27.4	24.6
	2015	744	24.1	11.3	24.1	43.4	16.6	4.2	0.4	24.7	23.5
Russian Federation	2011	645	50.2	2.2	50.2	26.4	20.4	0.8	0.0	49.0	51.4
	2015	694	48.6	2.4	48.6	31.4	13.8	3.5	0.4	45.9	51.4
Saudi Arabia	2011	657	27.0	14.6	27.0	34.7	21.6	1.8	0.3	20.5	33.9
	2015	634	25.1	14.5	25.1	36.1	19.8	2.8	1.8	21.4	28.6
Serbia	2011	622	20.1	1.2	20.1	60.7	14.8	3.0	0.2	22.9	17.7
	2015	572	17.6	0.9	17.6	58.9	17.5	4.0	1.2	13.5	21.4
Singapore	2011	909	49.2	3.7	49.2	41.4	5.2	0.4	0.0	50.5	48.0
	2015	923	50.0	2.8	50.0	37.6	9.3	0.2	0.1	45.3	54.3
Slovak Republic	2011	805	20.9	3.8	20.9	61.3	13.3	0.5	0.2	17.2	24.6
	2015	819	27.4	5.2	27.4	55.0	9.5	2.1	0.7	20.6	33.8
Slovenia	2011	624	35.5	2.9	35.5	42.2	16.2	2.9	0.4	34.8	36.0
	2015	640	39.1	1.9	39.1	35.9	20.2	2.0	0.9	38.6	39.7
Spain	2011	602	48.4	3.0	48.4	36.7	8.5	3.3	0.0	45.7	51.1
	2015	1121	41.5	2.5	41.5	43.8	6.0	5.2	0.9	40.1	43.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_06 (S051035): Life Science / Applying Type: MC Key: B
Label: Decrease air pollution in a city

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	36.4	2.0	36.4	37.5	21.5	1.9	0.6	33.7	39.0
	2015	592	49.6	1.9	49.6	22.5	20.1	4.8	1.0	48.1	51.1
Turkey	2011	1073	44.9	6.1	44.9	32.2	15.4	1.1	0.4	45.7	44.1
	2015	930	46.2	4.8	46.2	36.0	12.3	0.6	0.1	47.6	45.1
United Arab Emirates	2011	2105	28.1	12.0	28.1	38.0	19.2	2.1	0.5	29.6	26.6
	2015	3026	32.0	11.6	32.0	35.2	16.8	3.5	0.9	31.7	32.3
United States	2011	1797	30.7	3.8	30.7	46.7	16.9	1.6	0.3	30.2	31.2
	2015	1427	29.5	4.1	29.5	43.3	19.1	1.9	2.1	27.8	31.3

International Avg (n=40)	2011	30250	34.7	5.6	34.7	41.3	15.8	2.2	0.4	33.7	35.6
	2015	30695	33.8	5.6	33.8	40.6	15.9	3.2	1.0	32.3	35.2

Ontario, Canada	2011	645	31.7	3.6	31.7	45.4	17.6	0.8	0.9	30.7	32.6
	2015	656	29.0	2.7	29.0	41.6	22.7	2.0	1.9	30.5	27.6
Quebec, Canada	2011	599	35.4	1.5	35.4	54.8	5.5	2.2	0.6	35.3	35.4
	2015	380	26.9	1.5	26.9	55.7	14.5	0.9	0.6	28.8	25.1
Norway (4)	2011	455	34.2	5.7	34.2	34.9	21.7	3.3	0.1	30.5	38.9
	2015	595	29.8	4.0	29.8	44.9	15.0	5.7	0.6	28.0	31.6
Abu Dhabi, UAE	2011	602	26.8	12.8	26.8	39.1	18.3	2.2	0.8	29.5	24.0
	2015	713	29.7	16.7	29.7	31.3	17.5	3.1	1.7	26.4	32.4
Dubai, UAE	2011	870	28.8	10.5	28.8	41.6	16.7	1.8	0.7	26.7	30.6
	2015	1072	42.1	6.8	42.1	34.8	14.0	2.0	0.3	45.3	39.1
Florida, US	2011	393	32.2	4.0	32.2	46.9	16.1	0.6	0.2	29.8	34.4
	2015	285	21.5	4.8	21.5	50.0	18.4	3.8	1.4	18.7	24.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_07 (S051059): Physical Science / Knowing Type: CR 1 Point
Label: Difference between ice and water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	43.1	51.9	5.0	0.1	43.1	46.2	40.4
	2015	859	72.3	23.0	4.0	0.7	72.3	75.7	68.6
Bahrain	2011	585	37.7	52.1	9.0	1.2	37.7	40.9	34.7
	2015	593	27.9	60.1	10.3	1.8	27.9	29.5	26.3
Belgium (Flemish)	2011	685	62.4	34.3	3.3	0.1	62.4	60.9	63.5
	2015	777	52.5	40.2	6.5	0.8	52.5	53.7	51.1
Chile	2011	796	36.7	51.4	10.7	1.2	36.7	39.2	34.1
	2015	666	44.9	35.1	17.7	2.4	44.9	46.7	43.3
Chinese Taipei	2011	615	69.1	22.8	8.1	0.0	69.1	72.2	66.4
	2015	614	43.1	48.7	8.2	0.0	43.1	42.4	43.7
Croatia	2011	646	41.3	50.2	8.4	0.0	41.3	40.7	42.0
	2015	564	66.8	27.4	5.2	0.6	66.8	66.6	67.0
Czech Republic	2011	653	48.9	40.5	10.3	0.3	48.9	49.4	48.5
	2015	742	56.8	29.2	12.7	1.3	56.8	54.3	59.1
Denmark	2011	564	59.0	28.9	11.2	0.9	59.0	60.6	57.3
	2015	526	44.7	44.3	7.6	3.4	44.7	45.2	44.2
England	2011	470	41.1	53.6	5.2	0.1	41.1	44.1	38.2
	2015	570	45.5	51.6	2.7	0.2	45.5	44.4	46.6
Finland	2011	664	61.5	29.2	9.2	0.0	61.5	66.6	57.1
	2015	703	58.1	31.6	9.7	0.6	58.1	65.3	51.7
Georgia	2011	690	49.2	32.2	17.6	1.0	49.2	53.8	45.3
	2015	563	49.6	27.8	19.0	3.7	49.6	52.9	46.2
Germany	2011	573	41.8	49.4	8.4	0.3	41.8	42.1	41.5
	2015	561	70.4	17.4	10.3	1.9	70.4	76.4	65.3
Hong Kong SAR	2011	566	52.1	41.2	6.5	0.3	52.1	56.3	48.3
	2015	517	61.4	33.9	4.6	0.2	61.4	60.9	61.9
Hungary	2011	743	38.3	54.3	7.1	0.3	38.3	44.7	32.8
	2015	725	46.6	44.5	6.5	2.4	46.6	45.2	48.1
Iran, Islamic Rep. of	2011	829	36.2	47.3	16.1	0.4	36.2	36.8	35.7
	2015	545	17.1	61.4	18.7	2.8	17.1	21.5	13.1
Ireland	2011	655	64.7	30.9	4.3	0.1	64.7	64.7	64.7
	2015	623	48.1	49.3	2.3	0.3	48.1	44.9	50.8
Italy	2011	602	40.9	47.3	11.8	0.0	40.9	40.8	41.0
	2015	640	31.8	54.8	13.5	0.0	31.8	29.6	34.0
Japan	2011	630	69.8	25.2	4.7	0.3	69.8	70.2	69.4
	2015	633	69.0	25.6	4.7	0.7	69.0	74.1	63.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_07 (S051059): Physical Science / Knowing Type: CR 1 Point
Label: Difference between ice and water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	623	37.4	52.8	8.4	1.4	37.4	43.6	32.1
	2015	675	69.2	23.6	6.0	1.2	69.2	72.7	65.8
Korea, Rep. of	2011	616	66.2	32.6	1.0	0.2	66.2	66.6	65.9
	2015	665	72.2	27.1	0.6	0.0	72.2	70.8	73.6
Kuwait	2011	589	11.6	52.8	32.6	2.9	11.6	14.8	7.7
	2015	506	20.8	38.3	38.2	2.8	20.8	23.7	17.9
Lithuania	2011	681	41.0	52.6	6.1	0.3	41.0	41.3	40.7
	2015	652	56.8	36.0	7.1	0.1	56.8	60.9	52.6
Morocco	2011	1111	2.4	50.2	45.1	2.2	2.4	1.9	2.8
	2015	712	8.2	65.0	24.7	2.0	8.2	8.2	8.2
Netherlands	2011	471	52.9	45.2	1.7	0.2	52.9	53.3	52.5
	2015	642	56.9	39.2	3.5	0.4	56.9	59.4	54.8
New Zealand	2011	799	44.8	50.1	4.7	0.4	44.8	48.4	41.4
	2015	898	43.5	48.2	6.9	1.5	43.5	41.8	45.0
Northern Ireland	2011	503	44.3	49.7	5.9	0.1	44.3	46.4	42.6
	2015	448	48.0	49.3	2.4	0.3	48.0	50.1	46.0
Oman	2011	1476	10.1	58.5	30.1	1.3	10.1	11.7	8.6
	2015	1286	34.1	47.9	17.4	0.6	34.1	38.8	29.3
Portugal	2011	574	48.2	45.8	5.8	0.2	48.2	43.2	52.8
	2015	667	44.8	45.1	8.3	1.9	44.8	44.4	45.2
Qatar	2011	586	23.8	63.7	12.2	0.3	23.8	24.3	23.3
	2015	744	27.2	60.3	12.1	0.4	27.2	29.6	24.7
Russian Federation	2011	645	42.2	50.6	7.2	0.0	42.2	42.2	42.2
	2015	694	56.0	39.9	3.6	0.5	56.0	54.6	57.4
Saudi Arabia	2011	657	21.2	61.0	17.4	0.4	21.2	27.4	14.6
	2015	634	12.7	58.6	26.7	1.9	12.7	16.0	9.7
Serbia	2011	622	64.6	24.0	10.7	0.7	64.6	67.6	62.1
	2015	572	48.7	35.5	13.6	2.2	48.7	51.1	46.5
Singapore	2011	909	79.2	19.5	1.3	0.0	79.2	81.8	76.9
	2015	923	76.0	22.9	0.9	0.1	76.0	77.8	74.5
Slovak Republic	2011	805	44.6	45.9	9.4	0.2	44.6	45.8	43.3
	2015	819	43.5	44.5	11.3	0.8	43.5	42.6	44.3
Slovenia	2011	628	40.2	52.6	6.8	0.3	40.2	35.1	44.5
	2015	640	49.2	43.0	6.7	1.1	49.2	50.9	47.6
Spain	2011	602	36.1	51.6	12.3	0.0	36.1	34.8	37.4
	2015	1121	39.1	50.4	9.1	1.4	39.1	41.2	37.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_07 (S051059): Physical Science / Knowing Type: CR 1 Point
Label: Difference between ice and water

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	71.3	20.7	7.3	0.7	71.3	71.9	70.7
	2015	592	61.0	30.2	6.9	1.9	61.0	65.6	56.6
Turkey	2011	1073	47.5	45.9	6.1	0.5	47.5	50.1	45.3
	2015	930	45.4	48.5	6.1	0.1	45.4	46.0	44.9
United Arab Emirates	2011	2105	27.6	54.6	17.3	0.6	27.6	29.3	25.8
	2015	3026	31.1	51.6	16.4	0.9	31.1	32.9	29.5
United States	2011	1797	62.0	36.0	1.6	0.4	62.0	66.3	58.1
	2015	1427	49.0	46.4	2.0	2.6	49.0	52.4	45.6

International Avg (n=40)	2011	30387	45.3	44.0	10.2	0.5	45.3	47.0	43.8
	2015	30694	47.5	41.4	9.9	1.2	47.5	49.0	46.0

Ontario, Canada	2011	645	47.4	48.5	3.0	1.1	47.4	49.2	45.6
	2015	657	45.5	47.4	4.3	2.7	45.5	50.6	40.4
Quebec, Canada	2011	599	50.9	41.6	6.9	0.6	50.9	51.9	50.0
	2015	398	42.3	51.8	5.4	0.6	42.3	50.4	34.5
Norway (4)	2011	455	49.7	40.8	9.1	0.3	49.7	52.3	46.4
	2015	595	51.7	38.2	8.5	1.6	51.7	48.8	54.7
Abu Dhabi, UAE	2011	602	27.1	55.9	16.1	0.8	27.1	29.4	24.8
	2015	713	19.5	57.3	21.5	1.7	19.5	18.1	20.7
Dubai, UAE	2011	870	33.7	52.0	13.6	0.7	33.7	33.5	33.8
	2015	1072	48.4	44.7	6.6	0.3	48.4	53.5	43.6
Florida, US	2011	393	63.6	34.3	1.9	0.2	63.6	64.6	62.7
	2015	285	48.3	46.4	3.3	2.1	48.3	51.4	45.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_08 (S051142): Physical Science / Applying Type: MC Key: A
Label: Temperature which materials melt

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	58.1	58.1	2.8	5.1	32.9	1.0	0.1	57.0	59.1
	2015	859	54.8	54.8	4.3	4.0	33.6	2.3	1.0	52.9	56.9
Bahrain	2011	585	30.4	30.4	8.5	7.0	51.6	1.4	1.2	29.0	31.7
	2015	593	34.7	34.7	8.2	7.2	44.6	3.4	1.9	34.1	35.2
Belgium (Flemish)	2011	685	53.5	53.5	3.1	3.2	38.9	1.3	0.1	53.2	53.7
	2015	777	49.5	49.5	1.9	3.7	39.5	4.6	0.8	51.0	47.9
Chile	2011	796	52.1	52.1	7.5	5.9	30.2	2.2	2.2	49.2	55.2
	2015	666	54.3	54.3	6.0	4.5	28.4	4.0	2.8	57.3	51.6
Chinese Taipei	2011	615	36.5	36.5	5.5	2.1	55.6	0.3	0.0	36.1	36.9
	2015	614	37.8	37.8	5.1	0.9	55.0	1.1	0.0	38.5	37.2
Croatia	2011	646	44.4	44.4	5.1	4.7	43.6	2.0	0.2	40.6	48.3
	2015	564	55.5	55.5	3.8	3.7	34.1	2.2	0.7	57.1	53.9
Czech Republic	2011	653	51.4	51.4	2.1	2.7	41.9	1.7	0.3	51.3	51.5
	2015	742	56.9	56.9	1.9	1.6	35.1	3.1	1.4	53.7	59.8
Denmark	2011	564	53.5	53.5	2.4	1.8	36.4	4.6	1.1	52.9	54.2
	2015	526	52.0	52.0	2.8	2.6	36.1	2.9	3.6	50.1	53.8
England	2011	470	52.5	52.5	2.9	2.4	38.3	3.6	0.3	54.3	50.8
	2015	570	51.7	51.7	4.1	3.5	38.4	1.8	0.5	51.6	51.7
Finland	2011	664	45.2	45.2	7.7	3.6	41.7	1.7	0.0	50.0	41.0
	2015	703	51.0	51.0	5.1	3.2	36.7	3.1	0.9	51.5	50.7
Georgia	2011	690	29.0	29.0	9.2	8.4	48.7	3.2	1.5	34.8	24.1
	2015	563	23.2	23.2	8.0	5.3	54.2	4.3	5.0	22.4	23.9
Germany	2011	573	60.4	60.4	2.8	3.0	28.3	5.2	0.3	59.3	61.5
	2015	561	51.8	51.8	2.4	2.3	32.7	8.8	2.1	47.0	55.9
Hong Kong SAR	2011	566	34.3	34.3	7.1	4.7	52.3	1.3	0.3	30.7	37.5
	2015	517	45.8	45.8	6.5	3.9	42.4	1.3	0.2	42.7	48.9
Hungary	2011	743	56.4	56.4	2.9	3.3	35.4	1.7	0.3	57.5	55.5
	2015	725	55.3	55.3	1.1	1.8	33.8	5.1	2.9	54.2	56.6
Iran, Islamic Rep. of	2011	829	36.1	36.1	8.2	9.1	42.9	3.0	0.7	31.1	40.8
	2015	545	30.4	30.4	7.5	8.8	44.2	6.2	2.8	31.0	29.8
Ireland	2011	655	51.6	51.6	5.1	5.6	35.7	1.8	0.2	49.1	53.8
	2015	623	59.4	59.4	3.0	4.2	32.3	0.7	0.4	56.7	61.8
Italy	2011	602	54.8	54.8	2.2	0.9	40.6	1.5	0.0	51.4	57.9
	2015	641	52.2	52.2	1.9	1.5	38.9	5.5	0.0	47.1	57.3
Japan	2011	630	62.3	62.3	2.0	2.6	31.8	0.9	0.3	62.0	62.6
	2015	633	55.7	55.7	1.9	2.3	37.3	2.0	0.8	55.9	55.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_08 (S051142): Physical Science / Applying Type: MC Key: A
Label: Temperature which materials melt

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	38.7	38.7	5.8	6.3	46.0	1.7	1.5	39.6	38.0
	2015	675	48.2	48.2	5.2	5.6	38.8	1.1	1.2	50.8	45.6
Korea, Rep. of	2011	616	52.4	52.4	2.1	1.7	43.5	0.2	0.2	54.4	50.8
	2015	665	39.5	39.5	6.3	3.4	49.8	0.9	0.0	38.3	40.8
Kuwait	2011	585	21.5	21.5	11.8	14.3	43.2	5.9	3.2	21.0	22.2
	2015	506	25.7	25.7	15.2	9.8	38.2	7.6	3.5	20.3	31.8
Lithuania	2011	681	52.9	52.9	2.6	2.2	39.0	3.0	0.3	51.9	53.9
	2015	652	50.0	50.0	4.0	1.9	39.8	3.6	0.6	60.5	38.8
Morocco	2011	976	20.9	20.9	14.5	19.2	45.4	0.0	0.0	20.2	21.6
	2015	712	19.1	19.1	12.1	17.2	45.8	3.4	2.5	22.1	16.5
Netherlands	2011	471	60.3	60.3	3.3	3.2	31.6	1.3	0.2	58.0	62.6
	2015	641	57.2	57.2	2.6	1.8	32.1	4.8	1.5	55.7	59.4
New Zealand	2011	799	54.1	54.1	4.5	7.1	31.4	2.4	0.5	51.0	56.9
	2015	898	51.2	51.2	3.4	5.7	31.5	6.6	1.7	50.7	51.7
Northern Ireland	2011	503	57.4	57.4	4.4	4.8	31.8	1.4	0.1	58.5	56.4
	2015	446	62.7	62.7	2.5	3.3	30.8	0.7	0.0	59.9	65.4
Oman	2011	1476	28.8	28.8	9.7	10.9	45.2	4.1	1.3	28.1	29.5
	2015	1287	31.1	31.1	10.6	11.7	42.1	3.8	0.6	32.9	29.4
Portugal	2011	574	42.4	42.4	7.1	4.1	43.5	2.6	0.4	38.7	45.9
	2015	667	44.0	44.0	4.7	3.5	43.4	2.4	2.0	44.4	43.6
Qatar	2011	586	32.1	32.1	16.7	7.3	42.3	1.3	0.3	28.7	35.2
	2015	744	35.4	35.4	11.3	7.5	41.0	4.3	0.6	34.0	36.8
Russian Federation	2011	645	55.9	55.9	3.1	2.7	37.3	1.1	0.0	53.3	58.4
	2015	694	60.0	60.0	2.9	0.9	31.8	3.8	0.6	56.6	63.5
Saudi Arabia	2011	655	31.2	31.2	12.6	10.7	43.3	1.5	0.7	40.6	21.2
	2015	633	26.8	26.8	10.7	12.4	44.6	3.2	2.3	27.7	25.9
Serbia	2011	622	67.2	67.2	4.3	2.0	23.5	2.0	0.9	69.0	65.7
	2015	572	66.1	66.1	2.6	1.7	23.9	3.0	2.7	68.1	64.2
Singapore	2011	909	62.8	62.8	3.0	2.1	32.1	0.1	0.0	61.9	63.5
	2015	923	62.1	62.1	2.9	2.0	32.4	0.4	0.1	58.8	65.2
Slovak Republic	2011	805	51.6	51.6	1.7	8.0	37.5	1.1	0.2	51.2	51.9
	2015	819	45.7	45.7	3.1	7.7	39.2	3.3	1.1	42.9	48.3
Slovenia	2011	624	46.9	46.9	3.8	8.2	39.0	1.7	0.4	50.3	44.0
	2015	640	52.0	52.0	1.6	6.5	35.5	2.9	1.4	55.2	49.1
Spain	2011	602	49.2	49.2	4.8	3.3	38.9	3.5	0.4	48.5	49.7
	2015	1121	51.2	51.2	3.5	2.4	36.3	4.4	2.2	51.2	51.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_08 (S051142): Physical Science / Applying Type: MC Key: A
Label: Temperature which materials melt

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	51.3	51.3	4.7	2.8	37.6	3.1	0.7	54.0	48.6
	2015	592	54.9	54.9	3.8	3.0	31.1	4.9	2.3	55.9	53.9
Turkey	2011	1073	42.6	42.6	8.0	3.2	44.7	1.0	0.5	45.0	40.6
	2015	930	43.1	43.1	6.9	4.5	44.8	0.4	0.3	42.9	43.4
United Arab Emirates	2011	2105	33.7	33.7	10.9	7.9	44.2	2.7	0.7	32.8	34.5
	2015	3026	38.6	38.6	10.1	6.5	40.5	3.4	1.0	38.7	38.4
United States	2011	1797	59.2	59.2	3.7	2.8	32.3	1.4	0.6	56.9	61.2
	2015	1427	57.9	57.9	2.6	3.2	31.1	2.5	2.6	57.5	58.3

International Avg (n=40)	2011	30243	46.9	46.9	5.8	5.3	39.5	2.0	0.6	46.6	47.2
	2015	30692	47.4	47.4	5.1	4.7	38.0	3.3	1.5	47.0	47.7

Ontario, Canada	2011	645	48.4	48.4	2.7	2.9	42.7	1.7	1.5	46.4	50.5
	2015	656	50.9	50.9	2.7	2.4	38.7	2.2	3.1	52.1	49.6
Quebec, Canada	2011	599	40.4	40.4	3.7	4.2	49.0	1.5	1.1	39.9	41.0
	2015	395	37.9	37.9	5.7	5.9	47.9	1.2	1.3	39.9	35.9
Norway (4)	2011	455	36.0	36.0	3.9	4.3	52.9	2.3	0.6	33.4	39.3
	2015	595	37.4	37.4	4.6	3.2	47.2	5.7	2.0	30.5	44.4
Abu Dhabi, UAE	2011	602	31.9	31.9	11.4	9.9	42.9	3.0	0.9	28.0	36.0
	2015	713	34.6	34.6	11.1	8.0	41.1	3.5	1.7	32.5	36.4
Dubai, UAE	2011	870	38.2	38.2	7.5	6.2	45.0	2.3	0.8	35.8	40.2
	2015	1072	53.7	53.7	5.4	4.2	32.4	3.9	0.3	56.3	51.2
Florida, US	2011	393	56.9	56.9	5.0	2.1	35.2	0.3	0.5	51.7	61.7
	2015	285	57.4	57.4	7.3	2.8	25.6	3.9	2.9	53.9	61.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_09A (S051131A): Physical Science / Reasoning Type: MC Key: C
Label: Flashlight: shadow on wall

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	77.6	6.8	3.2	77.6	10.6	1.5	0.3	74.6	80.3
	2015	859	72.5	7.9	5.6	72.5	10.5	2.7	1.0	69.7	75.6
Bahrain	2011	585	41.2	13.8	30.8	41.2	10.9	2.0	1.3	38.5	43.8
	2015	593	43.0	13.0	25.5	43.0	13.0	3.3	2.1	40.9	44.9
Belgium (Flemish)	2011	685	69.6	6.2	10.7	69.6	13.0	0.3	0.1	64.1	74.0
	2015	777	67.8	7.5	8.8	67.8	13.1	1.3	1.4	63.4	72.6
Chile	2011	796	63.7	12.7	11.6	63.7	8.1	1.2	2.7	60.8	66.8
	2015	666	63.8	12.7	10.1	63.8	7.6	2.9	3.0	61.4	66.0
Chinese Taipei	2011	615	75.3	4.0	6.5	75.3	13.9	0.3	0.0	75.2	75.4
	2015	614	77.4	2.6	10.6	77.4	9.1	0.3	0.0	73.3	81.5
Croatia	2011	646	51.1	12.0	11.8	51.1	23.2	1.9	0.2	47.0	55.3
	2015	564	52.2	12.2	11.2	52.2	21.8	1.7	0.8	48.7	55.7
Czech Republic	2011	653	72.2	9.3	7.6	72.2	8.3	1.9	0.7	69.1	75.0
	2015	742	76.1	6.3	5.2	76.1	8.0	1.8	2.6	71.1	80.8
Denmark	2011	564	77.3	6.9	7.1	77.3	5.5	2.1	1.1	79.0	75.5
	2015	526	69.4	5.1	9.1	69.4	9.1	3.3	3.9	68.2	70.6
England	2011	470	79.7	3.4	4.2	79.7	10.3	2.1	0.3	81.6	77.9
	2015	570	75.7	5.7	5.5	75.7	10.8	1.1	1.3	75.0	76.5
Finland	2011	664	73.4	3.0	7.1	73.4	16.2	0.3	0.0	73.6	73.3
	2015	703	71.1	2.3	6.1	71.1	17.7	1.9	0.9	69.2	72.8
Georgia	2011	691	48.5	16.4	10.8	48.5	17.6	4.9	1.7	49.1	48.1
	2015	563	42.9	13.9	12.3	42.9	20.9	4.6	5.5	41.0	44.8
Germany	2011	573	68.9	7.5	8.4	68.9	12.0	2.6	0.5	66.4	71.4
	2015	561	68.8	8.8	4.6	68.8	10.7	4.5	2.6	65.1	72.0
Hong Kong SAR	2011	566	75.4	5.4	5.9	75.4	12.8	0.2	0.3	76.3	74.6
	2015	517	75.4	5.7	5.1	75.4	13.2	0.3	0.2	75.0	75.9
Hungary	2011	743	73.4	10.0	5.6	73.4	9.6	1.0	0.3	73.2	73.7
	2015	725	75.7	6.6	4.6	75.7	7.6	1.6	4.0	72.0	79.7
Iran, Islamic Rep. of	2011	829	46.1	12.3	9.2	46.1	27.7	3.8	0.9	39.8	52.0
	2015	545	45.7	12.1	5.7	45.7	26.1	5.3	5.0	40.2	50.7
Ireland	2011	655	71.9	9.3	5.8	71.9	12.3	0.5	0.2	66.3	76.6
	2015	623	70.7	7.9	4.9	70.7	15.5	0.6	0.4	68.5	72.7
Italy	2011	602	54.6	11.7	11.3	54.6	20.4	1.9	0.0	50.5	58.2
	2015	641	59.0	12.2	5.3	59.0	19.2	4.3	0.0	54.3	63.8
Japan	2011	630	82.5	3.0	3.4	82.5	10.5	0.3	0.3	79.6	85.1
	2015	633	78.2	6.2	3.4	78.2	10.9	0.4	0.8	75.5	81.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_09A (S051131A): Physical Science / Reasoning Type: MC Key: C
Label: Flashlight: shadow on wall

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	62.3	18.0	8.5	62.3	7.7	2.0	1.5	59.5	64.8
	2015	675	67.6	12.7	5.3	67.6	11.6	1.7	1.2	66.8	68.3
Korea, Rep. of	2011	616	83.8	3.0	2.2	83.8	10.7	0.2	0.2	80.9	86.4
	2015	665	91.2	0.7	2.5	91.2	5.3	0.3	0.0	90.2	92.2
Kuwait	2011	582	25.8	17.0	38.3	25.8	10.1	5.1	3.8	26.0	25.6
	2015	506	32.7	23.4	16.7	32.7	16.3	7.5	3.5	33.4	31.1
Lithuania	2011	681	79.6	7.7	6.5	79.6	4.8	1.1	0.3	75.5	83.3
	2015	652	78.4	6.1	7.6	78.4	6.5	0.5	0.9	79.5	77.1
Morocco	2011	949	28.3	26.5	35.4	28.3	9.8	0.0	0.0	24.8	31.0
	2015	713	29.5	18.0	35.7	29.5	11.9	1.9	3.0	31.1	28.2
Netherlands	2011	471	73.2	6.0	9.0	73.2	11.0	0.6	0.2	68.0	78.2
	2015	642	69.0	6.2	8.9	69.0	13.0	1.2	1.8	64.8	73.2
New Zealand	2011	799	67.3	8.0	8.5	67.3	13.7	1.9	0.6	67.8	66.9
	2015	898	66.6	9.5	7.2	66.6	12.7	2.3	1.7	65.4	67.8
Northern Ireland	2011	503	73.0	6.8	4.0	73.0	14.2	1.9	0.1	74.2	72.0
	2015	444	70.1	9.6	4.9	70.1	15.5	0.0	0.0	63.5	76.5
Oman	2011	1476	28.4	30.6	19.0	28.4	16.5	4.0	1.5	25.1	31.4
	2015	1288	33.7	24.0	19.6	33.7	18.2	3.8	0.7	33.8	33.5
Portugal	2011	574	51.4	8.0	17.2	51.4	21.8	1.0	0.5	44.7	57.6
	2015	667	51.6	8.6	12.7	51.6	22.1	1.9	3.0	44.3	58.6
Qatar	2011	586	42.7	18.1	21.7	42.7	15.6	1.6	0.3	39.0	46.0
	2015	744	48.9	13.7	18.0	48.9	15.4	3.3	0.6	49.8	48.1
Russian Federation	2011	645	79.5	5.8	6.3	79.5	7.6	0.8	0.0	75.8	83.1
	2015	694	83.0	2.3	6.5	83.0	6.1	1.3	0.8	82.7	83.3
Saudi Arabia	2011	653	29.7	18.0	40.5	29.7	9.2	1.9	0.7	22.5	37.2
	2015	634	28.8	20.1	33.2	28.8	12.7	2.4	2.9	27.3	30.2
Serbia	2011	622	56.7	10.1	17.6	56.7	11.5	3.1	1.0	50.5	62.0
	2015	572	61.0	11.6	10.7	61.0	10.9	2.5	3.2	56.7	65.1
Singapore	2011	909	89.1	2.2	3.7	89.1	4.3	0.8	0.0	90.7	87.5
	2015	923	92.5	1.9	1.9	92.5	2.8	0.9	0.1	92.6	92.3
Slovak Republic	2011	805	60.0	13.5	16.4	60.0	7.2	2.5	0.2	57.6	62.6
	2015	819	64.8	11.4	13.7	64.8	7.9	1.2	1.1	66.6	63.1
Slovenia	2011	628	54.7	7.5	21.1	54.7	15.1	1.3	0.3	48.9	59.7
	2015	640	52.6	8.1	18.6	52.6	15.8	2.9	2.0	50.1	54.9
Spain	2011	602	61.3	7.8	13.2	61.3	14.9	2.3	0.4	58.8	63.7
	2015	1121	59.9	6.4	12.9	59.9	15.4	2.5	3.0	57.4	62.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_09A (S051131A): Physical Science / Reasoning Type: MC Key: C
Label: Flashlight: shadow on wall

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	68.7	4.5	13.8	68.7	11.1	1.1	0.7	65.9	71.5
	2015	592	57.5	5.8	14.6	57.5	13.6	5.7	2.9	56.9	58.0
Turkey	2011	1073	44.4	21.3	14.8	44.4	17.9	1.1	0.6	43.6	45.1
	2015	930	47.2	17.6	15.6	47.2	18.3	0.9	0.4	44.1	49.8
United Arab Emirates	2011	2105	45.0	15.8	22.7	45.0	13.7	1.9	0.9	43.6	46.4
	2015	3026	52.3	10.9	19.4	52.3	12.1	4.1	1.1	49.4	54.8
United States	2011	1797	77.5	4.4	5.7	77.5	9.9	1.7	0.8	79.7	75.6
	2015	1427	73.8	4.5	5.8	73.8	10.3	2.5	3.1	74.4	73.2

International Avg (n=40)	2011	30216	62.1	10.4	12.7	62.1	12.5	1.7	0.6	59.7	64.4
	2015	30694	62.5	9.5	10.9	62.5	13.0	2.3	1.8	60.3	64.5

Ontario, Canada	2011	645	70.8	5.8	9.9	70.8	10.5	0.7	2.2	68.0	73.7
	2015	657	68.8	6.2	6.2	68.8	12.7	2.1	4.0	71.2	66.4
Quebec, Canada	2011	599	63.3	4.6	14.5	63.3	14.7	1.5	1.3	63.4	63.3
	2015	396	59.0	7.9	18.1	59.0	12.9	0.7	1.3	59.6	58.4
Norway (4)	2011	455	55.3	13.8	10.0	55.3	17.9	2.4	0.6	55.7	54.9
	2015	595	50.1	13.6	11.2	50.1	17.1	5.5	2.6	45.5	54.8
Abu Dhabi, UAE	2011	602	43.7	15.9	24.3	43.7	12.9	2.0	1.2	43.5	43.9
	2015	713	43.1	12.8	23.8	43.1	12.0	6.4	1.9	39.4	46.2
Dubai, UAE	2011	870	57.7	11.6	14.6	57.7	13.5	1.7	0.9	55.4	59.7
	2015	1072	69.3	6.4	10.5	69.3	10.8	2.3	0.7	68.8	69.9
Florida, US	2011	393	79.2	4.8	3.3	79.2	10.8	1.4	0.5	76.3	82.0
	2015	285	73.7	8.4	5.1	73.7	7.9	1.0	3.8	76.6	70.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_09B (S051131B): Physical Science / Knowing Type: MC Key: D
Label: Flashlight: color of shadow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	50.0	25.5	14.0	8.9	50.0	1.3	0.3	49.6	50.3
	2015	859	44.8	29.9	11.6	8.0	44.8	4.2	1.5	42.2	47.6
Bahrain	2011	585	27.3	33.5	19.2	16.3	27.3	1.7	2.0	22.7	31.8
	2015	593	29.0	37.9	12.3	14.0	29.0	4.4	2.4	29.5	28.4
Belgium (Flemish)	2011	685	51.0	32.4	9.2	6.4	51.0	0.8	0.2	51.6	50.5
	2015	777	48.5	30.1	10.5	8.1	48.5	1.2	1.7	46.4	50.8
Chile	2011	796	37.0	31.6	11.2	14.8	37.0	2.5	2.9	29.5	45.0
	2015	666	38.5	26.4	13.7	15.8	38.5	2.1	3.5	35.1	41.4
Chinese Taipei	2011	615	59.8	24.8	7.1	8.0	59.8	0.3	0.0	60.5	59.2
	2015	614	64.3	20.6	5.0	9.8	64.3	0.3	0.0	62.3	66.3
Croatia	2011	646	43.2	30.4	15.3	8.8	43.2	2.1	0.2	40.5	45.9
	2015	564	41.3	30.5	17.9	7.7	41.3	1.7	0.9	36.2	46.4
Czech Republic	2011	653	52.8	26.8	9.0	8.3	52.8	1.6	1.5	48.7	56.7
	2015	742	45.7	28.8	10.7	11.0	45.7	0.9	2.9	43.4	47.8
Denmark	2011	564	50.1	27.4	13.0	6.2	50.1	2.1	1.2	47.5	52.7
	2015	526	41.3	31.8	12.9	6.0	41.3	3.0	5.0	37.7	44.9
England	2011	470	61.6	17.7	11.4	6.2	61.6	2.7	0.4	59.2	63.9
	2015	570	51.4	26.1	13.9	5.4	51.4	1.4	1.8	47.9	55.1
Finland	2011	664	68.0	19.7	6.1	5.3	68.0	0.8	0.0	64.3	71.3
	2015	703	59.8	20.8	10.3	5.8	59.8	2.0	1.2	59.9	59.6
Georgia	2011	691	44.3	25.9	5.9	17.5	44.3	4.2	2.3	39.5	48.3
	2015	563	42.8	20.9	9.9	16.6	42.8	3.5	6.4	37.1	48.5
Germany	2011	573	56.2	23.1	11.6	6.0	56.2	2.4	0.7	55.5	56.8
	2015	561	48.4	24.0	11.4	7.9	48.4	4.1	4.3	43.5	52.6
Hong Kong SAR	2011	566	61.6	19.3	10.7	7.8	61.6	0.4	0.3	60.1	62.8
	2015	517	65.2	18.6	8.7	6.6	65.2	0.5	0.3	69.0	61.5
Hungary	2011	743	42.1	32.7	13.6	10.0	42.1	0.9	0.5	37.1	46.4
	2015	725	45.5	27.6	11.4	9.5	45.5	1.6	4.2	48.5	42.3
Iran, Islamic Rep. of	2011	829	38.6	29.3	14.1	12.4	38.6	4.4	1.2	36.6	40.5
	2015	545	34.6	28.8	14.5	11.6	34.6	3.9	6.6	33.7	35.3
Ireland	2011	655	49.1	28.2	13.3	7.4	49.1	1.7	0.3	46.2	51.6
	2015	623	47.7	30.2	12.7	7.9	47.7	1.0	0.4	45.6	49.5
Italy	2011	602	41.4	38.0	11.7	6.8	41.4	1.8	0.2	41.4	41.4
	2015	641	38.2	34.2	14.0	9.4	38.2	4.0	0.1	32.6	44.0
Japan	2011	630	53.1	21.6	16.0	8.1	53.1	0.8	0.3	49.6	56.1
	2015	633	49.9	24.0	15.6	8.5	49.9	0.9	1.0	50.4	49.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_09B (S051131B): Physical Science / Knowing Type: MC Key: D
Label: Flashlight: color of shadow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	42.0	24.9	12.6	14.3	42.0	4.7	1.5	38.5	45.1
	2015	675	49.4	22.4	11.9	13.2	49.4	1.9	1.3	50.1	48.6
Korea, Rep. of	2011	616	73.2	10.7	11.5	4.3	73.2	0.2	0.2	70.3	75.8
	2015	665	77.2	11.0	7.6	4.0	77.2	0.1	0.0	74.7	79.6
Kuwait	2011	579	25.6	32.5	12.7	17.6	25.6	6.4	5.2	24.5	26.9
	2015	506	29.5	27.3	13.3	18.2	29.5	8.0	3.8	28.1	31.3
Lithuania	2011	681	43.3	31.7	13.4	9.5	43.3	1.6	0.5	38.5	47.7
	2015	652	44.3	33.4	12.6	7.4	44.3	1.4	0.9	45.5	43.1
Morocco	2011	937	25.2	29.0	16.7	29.1	25.2	0.0	0.0	21.1	28.7
	2015	713	29.5	25.6	11.9	25.6	29.5	3.9	3.5	28.7	30.2
Netherlands	2011	471	61.2	21.8	8.1	7.0	61.2	1.1	0.6	57.3	65.1
	2015	641	56.6	22.9	10.1	6.9	56.6	1.4	2.2	54.9	57.9
New Zealand	2011	799	39.9	32.9	15.4	8.3	39.9	2.3	1.2	35.3	44.2
	2015	898	42.0	27.0	16.4	9.4	42.0	2.5	2.6	41.7	42.3
Northern Ireland	2011	503	52.5	22.1	15.8	6.5	52.5	2.7	0.4	45.3	58.8
	2015	442	42.9	30.2	18.3	7.3	42.9	1.3	0.0	39.2	46.5
Oman	2011	1476	22.5	35.7	17.0	18.6	22.5	4.2	1.9	21.1	23.8
	2015	1288	25.3	30.6	18.6	20.3	25.3	4.5	0.8	24.9	25.6
Portugal	2011	574	44.8	29.7	11.9	11.1	44.8	1.9	0.5	39.3	49.9
	2015	667	37.8	34.3	11.9	11.3	37.8	1.2	3.5	32.7	42.6
Qatar	2011	586	36.5	30.9	12.8	16.5	36.5	2.8	0.6	32.0	40.4
	2015	744	38.5	29.1	15.1	13.1	38.5	3.2	1.0	32.8	44.3
Russian Federation	2011	645	59.5	22.8	8.3	8.0	59.5	1.4	0.0	56.3	62.6
	2015	694	58.9	25.1	8.9	5.0	58.9	0.9	1.1	56.1	61.7
Saudi Arabia	2011	655	23.4	33.2	16.4	23.1	23.4	3.1	0.8	16.7	30.4
	2015	634	21.7	35.5	13.4	22.3	21.7	3.9	3.3	18.8	24.4
Serbia	2011	622	47.2	32.3	11.5	5.6	47.2	1.8	1.6	45.0	49.1
	2015	572	43.3	31.7	9.0	10.0	43.3	2.3	3.7	41.9	44.5
Singapore	2011	909	74.4	13.5	7.3	4.6	74.4	0.1	0.1	75.6	73.3
	2015	923	74.9	14.6	6.0	3.6	74.9	0.8	0.1	72.1	77.5
Slovak Republic	2011	805	45.7	26.8	13.8	11.1	45.7	1.9	0.8	39.0	52.6
	2015	819	44.8	29.7	12.5	10.2	44.8	1.5	1.3	38.2	51.0
Slovenia	2011	627	50.0	32.1	5.9	10.6	50.0	1.1	0.4	43.9	55.1
	2015	640	49.8	25.5	10.3	9.3	49.8	2.0	3.2	46.3	53.0
Spain	2011	602	43.0	35.4	8.8	9.9	43.0	2.1	0.9	41.0	44.9
	2015	1121	40.5	28.7	12.9	12.4	40.5	2.1	3.5	37.7	43.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_09B (S051131B): Physical Science / Knowing Type: MC Key: D
Label: Flashlight: color of shadow

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	60.9	21.3	9.1	6.3	60.9	1.4	1.0	55.6	66.1
	2015	592	51.2	23.6	9.4	7.4	51.2	4.3	4.2	49.3	53.0
Turkey	2011	1073	31.6	30.5	21.6	14.2	31.6	1.5	0.6	31.6	31.5
	2015	930	28.3	35.0	18.5	15.7	28.3	1.6	1.0	25.4	30.7
United Arab Emirates	2011	2105	33.6	33.9	13.9	14.7	33.6	2.7	1.2	27.5	39.8
	2015	3026	41.3	24.4	11.0	16.6	41.3	4.7	1.9	38.7	43.6
United States	2011	1797	55.4	20.8	13.0	7.7	55.4	1.9	1.2	53.0	57.5
	2015	1427	50.9	19.8	14.4	8.5	50.9	1.9	4.6	48.4	53.5

International Avg (n=40)	2011	30202	47.0	27.3	12.2	10.6	47.0	2.0	0.9	43.7	50.0
	2015	30691	45.4	27.0	12.3	10.7	45.4	2.4	2.3	43.2	47.5

Ontario, Canada	2011	645	48.4	25.1	14.5	7.3	48.4	1.9	2.7	48.7	48.2
	2015	656	47.2	26.4	11.5	7.3	47.2	2.8	4.8	48.6	45.7
Quebec, Canada	2011	599	54.2	27.2	6.9	8.1	54.2	2.0	1.6	51.2	57.2
	2015	396	49.0	30.1	7.1	11.4	49.0	0.9	1.4	48.4	49.6
Norway (4)	2011	455	41.7	28.1	17.4	9.4	41.7	2.6	0.7	38.8	45.3
	2015	595	40.7	31.9	13.9	5.5	40.7	5.1	2.8	35.9	45.6
Abu Dhabi, UAE	2011	602	30.6	36.2	14.6	15.3	30.6	1.9	1.4	25.1	36.2
	2015	713	33.6	25.8	12.6	19.1	33.6	6.2	2.6	29.7	36.9
Dubai, UAE	2011	870	43.5	29.9	13.1	10.1	43.5	2.3	1.1	34.8	50.9
	2015	1072	53.6	20.4	9.3	13.0	53.6	2.2	1.6	52.1	54.9
Florida, US	2011	393	54.7	22.6	11.7	8.3	54.7	1.2	1.4	47.8	61.1
	2015	285	53.5	17.1	14.3	10.6	53.5	0.0	4.5	52.3	54.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S09_10 (S051151): Earth Science / Knowing Type: CR 1 Point
Label: Earth's features and descriptions

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	83.3	15.6	0.7	0.3	83.3	83.4	83.3
	2015	859	82.9	13.4	2.1	1.7	82.9	83.6	82.2
Bahrain	2011	585	56.7	40.6	0.7	2.0	56.7	55.2	58.3
	2015	593	61.2	33.2	3.2	2.4	61.2	64.1	58.4
Belgium (Flemish)	2011	685	80.7	19.1	0.0	0.2	80.7	79.3	81.8
	2015	777	81.5	16.0	0.8	1.7	81.5	79.5	83.7
Chile	2011	796	69.6	25.4	2.0	2.9	69.6	65.6	74.0
	2015	666	71.6	19.7	5.3	3.5	71.6	70.6	72.4
Chinese Taipei	2011	615	93.9	6.0	0.2	0.0	93.9	93.0	94.7
	2015	614	95.5	4.5	0.0	0.0	95.5	94.5	96.5
Croatia	2011	646	96.4	3.0	0.4	0.2	96.4	96.2	96.5
	2015	564	95.8	3.1	0.1	0.9	95.8	97.4	94.3
Czech Republic	2011	653	86.4	11.3	0.9	1.5	86.4	83.9	88.7
	2015	742	89.7	6.2	1.0	3.0	89.7	87.4	91.9
Denmark	2011	564	84.7	12.4	1.6	1.2	84.7	84.4	85.1
	2015	526	84.0	9.3	1.8	5.0	84.0	81.9	86.0
England	2011	470	77.5	21.6	0.5	0.4	77.5	76.6	78.4
	2015	570	81.6	16.2	0.1	2.0	81.6	83.2	79.9
Finland	2011	664	91.0	8.7	0.3	0.0	91.0	91.8	90.4
	2015	703	88.4	8.7	1.6	1.3	88.4	92.0	85.2
Georgia	2011	691	60.7	34.3	2.6	2.3	60.7	62.1	59.6
	2015	563	56.4	34.4	2.7	6.5	56.4	56.6	56.3
Germany	2011	573	84.7	12.8	1.7	0.8	84.7	84.4	85.0
	2015	561	82.7	10.8	1.9	4.5	82.7	81.4	83.9
Hong Kong SAR	2011	566	90.0	9.4	0.3	0.3	90.0	90.2	89.8
	2015	517	93.7	5.8	0.2	0.3	93.7	94.3	93.1
Hungary	2011	742	87.5	11.2	0.7	0.5	87.5	87.5	87.5
	2015	725	83.1	12.3	0.4	4.2	83.1	81.6	84.7
Iran, Islamic Rep. of	2011	829	50.6	45.8	2.4	1.2	50.6	49.8	51.3
	2015	545	54.9	32.2	6.1	6.7	54.9	57.1	52.9
Ireland	2011	655	83.2	16.4	0.2	0.3	83.2	82.2	84.0
	2015	623	89.0	9.5	0.9	0.5	89.0	88.6	89.4
Italy	2011	602	86.4	12.3	1.0	0.2	86.4	85.8	87.0
	2015	641	82.3	17.1	0.5	0.1	82.3	80.5	84.0
Japan	2011	630	92.8	6.9	0.0	0.3	92.8	94.5	91.3
	2015	633	91.7	7.2	0.1	1.0	91.7	92.0	91.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_10 (S051151): Earth Science / Knowing Type: CR 1 Point
Label: Earth's features and descriptions

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	623	63.4	33.1	1.9	1.5	63.4	64.1	62.9
	2015	675	63.3	33.7	1.3	1.6	63.3	64.0	62.7
Korea, Rep. of	2011	616	95.1	4.7	0.0	0.2	95.1	96.5	93.9
	2015	665	97.0	3.0	0.0	0.0	97.0	98.0	95.9
Kuwait	2011	589	37.4	54.2	3.1	5.4	37.4	39.5	34.7
	2015	506	44.4	45.8	5.8	4.0	44.4	48.5	40.6
Lithuania	2011	681	79.2	19.9	0.4	0.5	79.2	79.2	79.2
	2015	652	78.6	19.8	0.7	0.9	78.6	74.9	82.5
Morocco	2011	1111	16.3	72.1	8.7	2.9	16.3	13.8	18.5
	2015	713	22.2	70.0	4.0	3.8	22.2	20.8	23.4
Netherlands	2011	471	81.8	17.2	0.4	0.6	81.8	80.8	82.8
	2015	642	83.8	13.1	0.8	2.2	83.8	85.9	81.4
New Zealand	2011	799	79.7	18.3	0.7	1.2	79.7	79.3	80.1
	2015	898	81.4	13.4	2.7	2.6	81.4	83.2	79.6
Northern Ireland	2011	503	85.0	13.6	1.0	0.4	85.0	86.6	83.7
	2015	448	86.5	12.6	0.6	0.3	86.5	86.8	86.2
Oman	2011	1476	41.8	54.2	2.0	2.0	41.8	45.7	38.0
	2015	1286	54.6	44.1	0.5	0.8	54.6	61.5	47.6
Portugal	2011	574	82.7	16.2	0.5	0.5	82.7	80.8	84.5
	2015	667	82.4	13.3	0.5	3.7	82.4	80.7	84.1
Qatar	2011	586	45.5	52.0	2.0	0.6	45.5	45.6	45.3
	2015	744	57.1	40.2	1.6	1.1	57.1	61.7	52.3
Russian Federation	2011	645	90.9	8.6	0.5	0.0	90.9	92.3	89.5
	2015	694	91.8	6.6	0.5	1.1	91.8	93.3	90.3
Saudi Arabia	2011	657	48.7	49.1	1.3	0.8	48.7	52.9	44.3
	2015	634	44.7	47.8	4.2	3.3	44.7	51.5	38.2
Serbia	2011	622	82.0	15.3	0.8	2.0	82.0	77.9	85.4
	2015	572	81.3	12.7	2.3	3.7	81.3	84.3	78.6
Singapore	2011	909	76.2	23.6	0.1	0.1	76.2	75.6	76.7
	2015	923	82.9	16.3	0.6	0.1	82.9	82.0	83.8
Slovak Republic	2011	805	86.6	12.0	0.7	0.8	86.6	85.3	87.9
	2015	819	84.3	11.9	2.4	1.4	84.3	82.9	85.7
Slovenia	2011	628	94.6	4.8	0.3	0.3	94.6	94.0	95.1
	2015	640	90.8	4.6	1.4	3.2	90.8	92.0	89.8
Spain	2011	602	81.1	17.7	0.3	0.9	81.1	80.0	82.2
	2015	1121	82.8	12.5	1.1	3.5	82.8	80.9	84.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_10 (S051151): Earth Science / Knowing Type: CR 1 Point
Label: Earth's features and descriptions

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	86.6	12.1	0.3	1.0	86.6	87.4	85.9
	2015	592	85.7	9.7	0.4	4.2	85.7	87.8	83.6
Turkey	2011	1073	59.9	37.9	1.5	0.7	59.9	58.7	61.0
	2015	930	68.2	29.9	0.9	1.0	68.2	67.7	68.6
United Arab Emirates	2011	2105	59.2	38.7	0.8	1.2	59.2	63.6	54.8
	2015	3026	59.0	37.6	1.4	2.0	59.0	57.7	60.1
United States	2011	1797	88.6	8.7	1.4	1.2	88.6	90.5	86.9
	2015	1427	83.1	11.5	0.6	4.7	83.1	81.8	84.5

International Avg (n=40)	2011	30387	75.5	22.4	1.1	1.0	75.5	75.4	75.5
	2015	30696	76.8	19.2	1.6	2.4	76.8	77.4	76.3

Ontario, Canada	2011	645	84.8	12.1	0.2	2.9	84.8	84.5	85.1
	2015	657	79.5	13.4	1.9	5.2	79.5	78.9	80.2
Quebec, Canada	2011	599	85.5	12.0	0.9	1.6	85.5	82.5	88.4
	2015	398	82.9	15.5	0.1	1.4	82.9	81.4	84.3
Norway (4)	2011	455	82.2	16.5	0.5	0.7	82.2	85.6	78.0
	2015	595	79.6	14.6	2.5	3.3	79.6	74.8	84.5
Abu Dhabi, UAE	2011	602	54.5	42.9	1.2	1.4	54.5	61.3	47.5
	2015	713	50.4	45.7	1.3	2.6	50.4	49.5	51.3
Dubai, UAE	2011	870	66.8	31.2	0.9	1.1	66.8	66.9	66.6
	2015	1072	75.0	22.8	0.5	1.6	75.0	74.7	75.3
Florida, US	2011	393	91.5	6.5	0.7	1.4	91.5	90.4	92.5
	2015	285	82.1	12.1	1.4	4.5	82.1	84.6	79.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S09_11 (S051157): Earth Science / Applying Type: MC Key: C
Label: How did fish become part of rock?

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	48.9	28.9	11.6	48.9	9.0	1.3	0.3	46.0	51.4
	2015	859	49.2	25.1	10.2	49.2	11.3	2.1	2.1	46.0	52.7
Bahrain	2011	585	26.1	36.9	17.6	26.1	15.9	1.6	2.0	27.6	24.7
	2015	593	36.0	26.8	15.8	36.0	13.8	4.0	3.6	33.2	38.6
Belgium (Flemish)	2011	685	33.4	40.8	15.5	33.4	8.9	1.2	0.2	31.1	35.2
	2015	777	31.5	36.7	16.2	31.5	10.2	3.3	2.2	30.7	32.4
Chile	2011	796	29.7	35.4	18.7	29.7	10.4	1.8	4.0	26.2	33.6
	2015	666	28.6	36.3	16.2	28.6	11.0	4.2	3.7	25.6	31.2
Chinese Taipei	2011	615	33.3	53.6	3.0	33.3	8.7	1.3	0.0	33.0	33.6
	2015	614	32.7	51.7	3.2	32.7	10.6	1.7	0.0	28.2	37.2
Croatia	2011	646	28.0	32.9	23.2	28.0	14.5	1.0	0.4	21.4	34.9
	2015	564	44.7	28.6	16.3	44.7	7.8	1.4	1.1	42.1	47.3
Czech Republic	2011	653	47.0	33.4	10.0	47.0	6.8	1.3	1.5	40.3	53.2
	2015	742	49.3	29.7	8.3	49.3	6.3	3.0	3.4	42.6	55.5
Denmark	2011	564	42.8	34.2	9.2	42.8	9.1	2.9	1.7	41.0	44.6
	2015	526	38.9	32.2	13.7	38.9	7.3	2.3	5.5	29.6	48.1
England	2011	470	43.5	31.8	12.6	43.5	8.3	3.3	0.4	40.5	46.3
	2015	570	48.9	26.5	12.1	48.9	9.4	1.0	2.0	47.4	50.6
Finland	2011	664	51.6	27.3	9.8	51.6	11.0	0.3	0.0	50.5	52.7
	2015	703	53.6	22.8	7.2	53.6	13.0	1.6	1.8	54.8	52.6
Georgia	2011	691	28.3	31.3	18.9	28.3	16.4	2.7	2.3	26.8	29.5
	2015	563	18.5	33.8	14.8	18.5	20.4	5.4	7.1	17.0	20.1
Germany	2011	573	58.8	24.4	6.8	58.8	5.3	3.4	1.3	54.1	63.5
	2015	561	45.0	25.1	12.1	45.0	7.8	4.3	5.6	36.7	52.2
Hong Kong SAR	2011	566	49.7	34.0	8.3	49.7	7.2	0.5	0.3	46.9	52.1
	2015	517	48.0	35.3	8.3	48.0	7.8	0.2	0.3	45.8	50.3
Hungary	2011	743	41.2	34.6	8.5	41.2	13.7	1.5	0.6	38.4	43.5
	2015	725	47.3	24.2	6.8	47.3	15.3	1.8	4.6	43.5	51.5
Iran, Islamic Rep. of	2011	829	41.9	22.7	17.7	41.9	12.7	3.4	1.6	37.9	45.5
	2015	545	38.2	21.9	15.9	38.2	10.1	6.7	7.3	32.9	42.9
Ireland	2011	655	40.3	32.5	14.8	40.3	10.7	1.1	0.5	34.7	45.2
	2015	623	46.1	28.5	13.4	46.1	10.1	1.0	0.8	38.3	53.0
Italy	2011	602	42.7	32.8	9.5	42.7	13.7	1.2	0.2	35.3	49.2
	2015	641	44.3	27.6	11.4	44.3	12.7	3.9	0.1	42.0	46.6
Japan	2011	630	58.8	25.9	5.9	58.8	8.4	0.6	0.3	55.1	62.0
	2015	633	57.0	27.1	7.7	57.0	6.6	0.5	1.0	54.7	59.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_11 (S051157): Earth Science / Applying Type: MC Key: C
Label: How did fish become part of rock?

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	624	34.3	24.5	14.8	34.3	20.9	3.9	1.6	33.0	35.3
	2015	675	37.7	21.8	15.0	37.7	21.4	2.3	1.7	37.4	38.1
Korea, Rep. of	2011	616	81.5	7.0	7.3	81.5	4.0	0.0	0.2	83.0	80.3
	2015	665	74.0	11.3	7.5	74.0	7.0	0.2	0.0	72.2	75.7
Kuwait	2011	578	21.5	31.0	22.9	21.5	12.6	7.0	5.0	21.6	21.3
	2015	506	18.2	33.9	18.4	18.2	15.0	10.1	4.5	14.7	20.9
Lithuania	2011	681	48.5	26.7	13.2	48.5	9.2	2.0	0.5	45.6	51.1
	2015	652	37.9	32.1	13.9	37.9	12.6	2.6	0.9	35.1	40.9
Morocco	2011	936	26.8	22.2	30.3	26.8	20.7	0.0	0.0	24.5	28.7
	2015	713	31.0	20.2	21.6	31.0	19.2	2.9	5.0	29.1	32.6
Netherlands	2011	471	53.1	30.2	9.3	53.1	4.7	2.2	0.6	50.9	55.2
	2015	642	47.3	29.8	10.8	47.3	8.1	1.4	2.6	42.2	53.2
New Zealand	2011	799	50.0	27.0	9.4	50.0	10.7	1.2	1.7	45.3	54.5
	2015	898	49.1	24.8	9.5	49.1	9.4	4.0	3.1	43.8	54.0
Northern Ireland	2011	503	42.2	32.8	13.1	42.2	9.9	1.6	0.4	34.2	49.0
	2015	440	46.9	31.4	10.9	46.9	10.7	0.0	0.0	43.3	50.5
Oman	2011	1476	21.7	33.1	23.5	21.7	16.2	3.4	2.1	21.0	22.4
	2015	1285	28.3	31.1	22.6	28.3	13.6	3.6	0.8	28.7	27.9
Portugal	2011	574	38.3	34.9	14.3	38.3	10.2	1.4	0.8	32.5	43.5
	2015	667	37.3	30.2	11.7	37.3	15.0	1.5	4.2	32.9	41.5
Qatar	2011	586	33.3	26.4	23.0	33.3	14.4	1.4	1.5	36.3	30.7
	2015	744	30.7	27.4	20.1	30.7	16.1	4.4	1.3	29.0	32.3
Russian Federation	2011	645	40.8	28.2	7.3	40.8	22.9	0.6	0.2	35.7	45.8
	2015	694	46.4	23.3	7.6	46.4	19.2	2.3	1.1	42.3	50.5
Saudi Arabia	2011	654	21.3	36.1	27.9	21.3	12.5	1.0	1.2	22.6	19.8
	2015	634	26.7	35.2	20.2	26.7	11.8	2.1	4.0	24.3	29.0
Serbia	2011	622	29.1	31.8	24.8	29.1	9.4	2.4	2.4	29.4	28.9
	2015	572	23.4	35.4	24.3	23.4	10.4	2.5	4.0	22.6	24.1
Singapore	2011	909	49.6	27.6	13.2	49.6	8.8	0.6	0.1	44.5	54.3
	2015	923	47.9	29.8	14.7	47.9	6.3	1.1	0.1	42.8	52.6
Slovak Republic	2011	805	27.7	41.1	15.8	27.7	12.8	1.6	1.0	28.0	27.5
	2015	819	30.1	38.4	16.7	30.1	11.2	1.8	1.8	24.3	35.5
Slovenia	2011	627	33.5	38.3	17.5	33.5	9.1	0.9	0.7	28.3	37.9
	2015	640	39.5	34.1	10.3	39.5	10.6	2.0	3.5	32.4	46.0
Spain	2011	602	44.2	28.7	14.3	44.2	10.2	1.6	0.9	40.8	47.5
	2015	1121	48.5	22.5	9.1	48.5	12.4	3.4	4.1	43.8	53.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S09_11 (S051157): Earth Science / Applying Type: MC Key: C
Label: How did fish become part of rock?

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	677	65.1	23.9	5.1	65.1	4.0	0.8	1.1	66.4	63.8
	2015	592	61.6	13.9	8.0	61.6	6.9	5.4	4.2	57.3	65.7
Turkey	2011	1073	21.0	37.2	23.6	21.0	16.0	1.0	1.1	17.0	24.4
	2015	930	32.2	31.2	21.9	32.2	12.3	1.2	1.2	26.9	36.7
United Arab Emirates	2011	2105	31.4	34.0	20.9	31.4	10.3	2.1	1.3	31.4	31.4
	2015	3026	35.9	27.7	19.8	35.9	11.4	3.0	2.2	35.3	36.4
United States	2011	1797	61.0	18.9	8.4	61.0	8.5	1.8	1.4	58.1	63.6
	2015	1427	51.5	20.9	9.1	51.5	11.2	2.4	4.8	48.8	54.2

International Avg (n=40)	2011	30199	40.6	30.9	14.5	40.6	11.2	1.7	1.1	37.9	42.9
	2015	30687	41.0	28.7	13.3	41.0	11.6	2.7	2.7	37.5	44.3

Ontario, Canada	2011	645	54.5	21.5	9.2	54.5	11.3	0.6	2.9	49.9	59.0
	2015	656	49.4	21.3	9.2	49.4	11.1	3.1	5.9	50.9	47.9
Quebec, Canada	2011	599	46.4	35.2	7.1	46.4	8.6	1.2	1.6	41.4	51.2
	2015	394	40.2	39.4	8.8	40.2	8.3	1.8	1.5	38.3	41.9
Norway (4)	2011	455	42.3	31.7	11.1	42.3	11.3	2.9	0.7	40.6	44.6
	2015	595	40.1	25.5	13.2	40.1	11.6	4.9	4.6	37.4	42.8
Abu Dhabi, UAE	2011	602	31.0	32.8	23.5	31.0	9.3	1.8	1.6	31.5	30.6
	2015	713	36.9	25.2	19.4	36.9	12.1	3.8	2.6	36.0	37.7
Dubai, UAE	2011	870	34.7	31.6	18.4	34.7	11.8	2.2	1.2	35.4	34.1
	2015	1072	43.4	26.9	16.4	43.4	10.0	1.5	1.8	42.6	44.1
Florida, US	2011	393	60.3	22.0	9.4	60.3	5.5	1.1	1.6	54.4	65.7
	2015	285	49.0	30.4	8.4	49.0	5.6	1.4	5.2	48.3	49.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_01 (S051161): Life Science / Knowing Type: MC Key: D
Label: Function of human muscles

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	43.2	14.0	33.4	7.1	43.2	2.2	0.0	39.8	46.6
	2015	864	42.2	17.4	32.3	5.8	42.2	1.8	0.6	39.2	44.7
Bahrain	2011	579	41.7	8.1	37.1	10.7	41.7	2.0	0.4	42.9	40.5
	2015	592	45.0	9.2	33.3	11.3	45.0	1.1	0.1	46.4	43.7
Belgium (Flemish)	2011	689	63.1	9.2	19.5	6.7	63.1	1.4	0.1	62.4	63.9
	2015	778	62.4	11.9	15.7	6.9	62.4	3.0	0.1	66.1	58.5
Chile	2011	784	42.1	6.1	41.2	7.9	42.1	1.8	0.9	45.3	39.3
	2015	687	44.9	11.2	38.9	3.6	44.9	1.0	0.4	42.3	47.3
Chinese Taipei	2011	0
	2015	618	15.3	2.3	79.5	1.6	15.3	1.3	0.0	12.2	18.3
Croatia	2011	657	76.8	2.4	17.9	2.0	76.8	1.0	0.0	74.2	78.9
	2015	575	73.4	1.8	21.2	2.5	73.4	0.5	0.5	72.9	73.9
Czech Republic	2011	652	55.2	8.7	28.2	4.6	55.2	3.3	0.0	53.4	56.7
	2015	750	48.4	10.8	32.3	6.3	48.4	2.2	0.0	44.3	52.4
Denmark	2011	553	52.5	12.4	21.3	9.8	52.5	3.7	0.3	49.9	55.2
	2015	516	49.6	12.9	22.6	10.0	49.6	4.6	0.3	46.8	52.0
England	2011	496	49.5	8.3	33.0	7.3	49.5	1.7	0.1	52.8	46.4
	2015	578	48.5	9.4	35.4	4.8	48.5	1.7	0.2	50.1	46.8
Finland	2011	659	57.0	1.2	37.9	3.2	57.0	0.8	0.0	54.3	59.6
	2015	712	49.7	4.1	37.3	5.6	49.7	3.1	0.3	41.8	56.5
Georgia	2011	699	56.6	4.0	29.1	6.3	56.6	3.2	0.9	63.8	49.8
	2015	553	46.6	6.9	35.4	6.8	46.6	3.4	1.0	46.2	46.9
Germany	2011	575	60.1	7.1	23.5	5.6	60.1	3.8	0.0	59.0	61.1
	2015	567	59.9	8.4	23.3	5.5	59.9	2.7	0.3	59.6	60.2
Hong Kong SAR	2011	562	37.9	4.9	51.3	5.0	37.9	0.9	0.0	33.2	42.2
	2015	507	43.7	5.4	44.9	5.3	43.7	0.5	0.1	35.7	50.5
Hungary	2011	747	64.8	2.0	25.9	5.5	64.8	1.8	0.0	62.3	67.6
	2015	722	60.0	3.0	27.0	6.9	60.0	2.8	0.3	56.0	63.4
Iran, Islamic Rep. of	2011	818	45.4	13.5	25.9	10.3	45.4	4.7	0.2	45.8	45.1
	2015	545	40.1	16.5	24.8	12.0	40.1	5.6	1.0	43.3	37.2
Ireland	2011	649	55.2	9.1	30.4	3.7	55.2	1.4	0.2	53.9	56.5
	2015	615	58.1	8.3	30.1	2.9	58.1	0.5	0.0	50.6	64.6
Italy	2011	592	51.8	3.3	29.9	10.6	51.8	4.2	0.3	56.2	47.1
	2015	620	51.2	4.6	26.7	13.2	51.2	4.3	0.0	52.5	50.2
Japan	2011	625	57.1	4.5	21.9	15.8	57.1	0.6	0.1	52.4	61.9
	2015	618	55.7	4.1	25.6	13.9	55.7	0.7	0.0	49.3	61.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_01 (S051161): Life Science / Knowing Type: MC Key: D
Label: Function of human muscles

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	60.6	4.8	25.9	6.9	60.6	1.6	0.3	57.5	63.8
	2015	670	65.8	5.2	21.8	6.3	65.8	0.7	0.3	68.5	63.4
Korea, Rep. of	2011	617	35.0	3.8	45.7	15.0	35.0	0.5	0.0	33.4	36.7
	2015	668	45.1	4.8	39.6	10.3	45.1	0.3	0.0	39.8	49.8
Kuwait	2011	587	39.9	10.2	26.8	15.2	39.9	6.6	1.3	45.7	32.8
	2015	511	34.5	11.5	29.5	13.9	34.5	9.7	0.8	41.3	27.7
Lithuania	2011	659	48.5	12.6	30.9	6.7	48.5	1.3	0.0	42.2	53.9
	2015	640	44.3	13.1	33.3	6.1	44.3	2.9	0.2	44.6	44.0
Morocco	2011	1094	30.8	9.0	30.5	23.8	30.8	4.8	1.1	30.4	31.3
	2015	706	39.1	6.0	30.3	20.3	39.1	4.1	0.1	43.5	35.3
Netherlands	2011	468	65.5	17.0	11.9	5.1	65.5	0.5	0.0	64.2	67.3
	2015	640	60.2	17.1	15.8	5.9	60.2	1.0	0.1	58.9	61.6
New Zealand	2011	790	44.6	13.2	34.7	5.7	44.6	1.9	0.0	43.5	45.7
	2015	892	46.6	13.6	33.1	3.9	46.6	2.0	0.8	44.1	49.2
Northern Ireland	2011	500	51.0	10.9	31.7	4.7	51.0	1.7	0.0	50.8	51.2
	2015	445	45.7	13.6	34.6	6.0	45.7	0.0	0.0	45.5	45.9
Oman	2011	1484	35.7	12.3	29.5	17.3	35.7	4.6	0.6	38.6	33.2
	2015	1289	43.8	9.8	30.1	13.1	43.8	2.7	0.6	45.3	42.2
Portugal	2011	584	45.4	2.2	45.2	4.7	45.4	2.6	0.0	43.5	47.1
	2015	661	40.3	1.7	50.9	4.8	40.3	2.2	0.1	34.7	45.2
Qatar	2011	587	35.5	14.8	33.7	13.8	35.5	1.9	0.4	35.6	35.3
	2015	740	38.2	13.2	35.7	11.1	38.2	1.0	0.9	39.2	37.0
Russian Federation	2011	648	62.7	9.1	20.2	6.6	62.7	1.3	0.2	64.7	60.8
	2015	707	65.3	9.1	16.3	7.3	65.3	1.9	0.2	69.6	61.3
Saudi Arabia	2011	672	45.9	9.5	26.1	16.5	45.9	1.3	0.7	48.6	43.1
	2015	616	43.1	10.8	26.9	15.0	43.1	3.0	1.2	48.4	38.3
Serbia	2011	628	57.1	9.7	25.4	2.7	57.1	4.9	0.2	59.2	54.9
	2015	573	57.6	5.2	29.2	4.5	57.6	3.5	0.0	56.0	59.3
Singapore	2011	906	68.3	7.0	23.3	1.4	68.3	0.0	0.0	65.3	71.3
	2015	930	64.5	7.1	26.0	2.1	64.5	0.4	0.0	63.8	65.1
Slovak Republic	2011	796	58.9	7.7	29.0	3.2	58.9	1.2	0.0	58.5	59.3
	2015	820	60.2	8.0	25.3	3.7	60.2	2.5	0.3	57.2	63.1
Slovenia	2011	645	62.0	4.2	26.6	5.1	62.0	2.1	0.0	55.0	69.3
	2015	633	63.7	5.4	26.4	3.1	63.7	1.2	0.2	57.8	70.2
Spain	2011	594	36.8	6.2	47.5	5.4	36.8	4.1	0.0	36.4	37.3
	2015	1120	38.2	4.8	47.5	7.0	38.2	2.2	0.3	36.8	39.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_01 (S051161): Life Science / Knowing Type: MC Key: D
Label: Function of human muscles

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	75.3	6.7	10.3	4.3	75.3	3.2	0.1	74.1	76.3
	2015	594	70.9	7.1	11.6	6.7	70.9	3.2	0.4	68.1	73.3
Turkey	2011	1080	69.1	3.9	19.1	7.5	69.1	0.4	0.0	69.0	69.2
	2015	933	62.7	5.0	23.9	7.9	62.7	0.4	0.0	62.2	63.3
United Arab Emirates	2011	2079	38.9	9.5	37.0	11.5	38.9	2.6	0.5	42.5	35.3
	2015	3005	39.8	10.0	37.3	10.3	39.8	2.3	0.3	40.4	39.2
United States	2011	1789	42.9	11.6	37.0	7.1	42.9	1.0	0.4	39.6	46.2
	2015	1430	43.2	12.9	35.6	6.4	43.2	1.3	0.5	41.8	44.6

International Avg (n=40)	2011	29661	51.8	8.1	29.6	8.0	51.8	2.3	0.2	51.3	52.3
	2015	30640	50.2	8.6	31.2	7.5	50.2	2.2	0.3	49.1	51.2

Ontario, Canada	2011	649	44.4	13.4	33.7	6.3	44.4	1.8	0.4	45.0	43.8
	2015	657	39.0	14.4	33.4	9.1	39.0	2.9	1.2	38.4	39.6
Quebec, Canada	2011	617	51.1	12.8	26.6	7.6	51.1	1.9	0.0	49.5	52.7
	2015	403	45.2	10.9	31.9	11.1	45.2	0.9	0.0	42.3	48.5
Norway (4)	2011	445	55.3	13.4	25.3	2.6	55.3	3.0	0.5	49.9	59.9
	2015	590	53.4	11.2	27.6	5.0	53.4	1.0	1.9	52.7	54.2
Abu Dhabi, UAE	2011	591	38.8	11.1	38.2	9.8	38.8	1.7	0.4	44.7	32.8
	2015	708	40.8	10.5	34.5	12.0	40.8	1.7	0.6	41.8	39.8
Dubai, UAE	2011	867	37.0	11.1	37.7	10.3	37.0	3.4	0.6	37.2	36.8
	2015	1051	41.3	8.2	41.3	7.3	41.3	1.8	0.1	39.3	43.1
Florida, US	2011	375	40.4	15.6	36.5	7.1	40.4	0.5	0.0	39.8	41.0
	2015	289	38.0	12.7	41.5	6.4	38.0	0.7	0.7	38.5	37.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_02 (\$051051): Life Science / Knowing Type: MC Key: B
Label: Main function of leaves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	14.2	31.2	14.2	42.0	10.7	1.9	0.0	14.2	14.2
	2015	864	17.0	28.0	17.0	40.1	11.9	2.5	0.6	16.0	17.8
Bahrain	2011	579	62.0	20.7	62.0	11.2	5.4	0.3	0.4	65.6	58.5
	2015	592	65.7	15.3	65.7	11.8	6.2	0.9	0.1	69.9	61.9
Belgium (Flemish)	2011	689	16.5	34.4	16.5	31.5	16.6	0.9	0.2	18.8	14.0
	2015	778	21.9	29.3	21.9	29.7	15.7	3.2	0.3	22.0	21.8
Chile	2011	784	28.4	42.2	28.4	18.0	9.2	1.3	0.9	29.0	27.8
	2015	687	35.6	35.2	35.6	18.8	8.1	1.7	0.6	35.2	36.1
Chinese Taipei	2011	622	36.1	26.5	36.1	26.2	10.3	0.7	0.2	33.4	38.4
	2015	618	35.7	24.1	35.7	28.3	10.5	1.4	0.0	34.2	37.2
Croatia	2011	657	52.1	21.4	52.1	15.8	8.9	1.8	0.0	55.3	49.4
	2015	575	39.5	30.2	39.5	19.2	8.9	1.7	0.5	40.7	38.3
Czech Republic	2011	652	37.5	31.7	37.5	21.3	5.6	3.8	0.0	34.6	40.1
	2015	750	36.0	32.0	36.0	23.2	7.4	1.4	0.0	35.0	37.0
Denmark	2011	553	12.6	36.9	12.6	27.9	18.2	4.1	0.3	14.1	11.0
	2015	516	16.0	35.5	16.0	29.7	14.8	3.0	1.0	17.8	14.5
England	2011	496	32.2	25.8	32.2	25.2	14.7	2.0	0.1	31.2	33.2
	2015	578	30.2	26.7	30.2	26.5	14.8	1.4	0.3	26.4	34.3
Finland	2011	659	49.7	24.5	49.7	17.3	7.1	1.3	0.0	51.0	48.5
	2015	712	40.8	23.7	40.8	22.8	9.3	3.2	0.3	45.0	37.0
Georgia	2011	699	14.4	37.9	14.4	24.7	16.7	4.7	1.5	16.2	12.7
	2015	553	21.4	31.4	21.4	28.0	16.0	1.7	1.5	24.5	18.6
Germany	2011	575	15.3	42.5	15.3	29.7	9.6	2.7	0.3	15.1	15.5
	2015	567	14.1	42.4	14.1	27.3	12.7	3.0	0.5	10.6	17.4
Hong Kong SAR	2011	562	50.2	27.1	50.2	18.3	3.9	0.4	0.0	47.3	53.0
	2015	507	52.9	24.0	52.9	17.0	5.5	0.5	0.1	45.6	59.1
Hungary	2011	747	43.5	19.8	43.5	24.9	9.6	2.3	0.0	41.1	46.1
	2015	722	47.4	14.4	47.4	23.2	11.7	3.0	0.3	44.9	49.6
Iran, Islamic Rep. of	2011	818	72.1	13.3	72.1	10.0	2.4	1.8	0.3	74.2	70.0
	2015	545	62.7	16.9	62.7	10.6	5.1	3.3	1.5	62.5	63.0
Ireland	2011	649	21.4	29.8	21.4	30.9	16.3	1.4	0.2	21.0	21.7
	2015	615	21.3	29.1	21.3	30.0	19.2	0.2	0.2	22.4	20.4
Italy	2011	592	37.1	36.1	37.1	18.6	6.3	1.7	0.3	36.5	37.8
	2015	620	42.4	27.2	42.4	19.1	9.7	1.6	0.0	41.7	43.2
Japan	2011	625	45.7	23.4	45.7	23.1	6.8	0.8	0.1	47.0	44.4
	2015	618	44.9	19.9	44.9	27.4	7.2	0.5	0.0	46.6	43.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_02 (\$051051): Life Science / Knowing Type: MC Key: B
Label: Main function of leaves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	26.6	42.8	26.6	15.8	12.1	1.9	0.7	27.6	25.6
	2015	670	43.2	28.5	43.2	20.5	7.2	0.4	0.3	44.6	41.8
Korea, Rep. of	2011	617	61.7	22.0	61.7	11.5	4.2	0.6	0.0	61.9	61.6
	2015	668	63.6	18.2	63.6	14.4	3.5	0.4	0.0	61.7	65.4
Kuwait	2011	586	54.6	15.2	54.6	16.6	6.1	6.2	1.3	59.8	48.4
	2015	511	45.5	16.9	45.5	19.1	8.0	8.8	1.7	50.7	40.2
Lithuania	2011	659	23.8	44.6	23.8	20.9	9.8	1.0	0.0	25.8	22.0
	2015	640	36.0	36.6	36.0	15.4	9.7	2.0	0.2	37.4	34.7
Morocco	2011	1093	27.0	20.1	27.0	32.6	14.9	4.1	1.3	30.5	23.7
	2015	709	34.8	18.2	34.8	29.0	14.9	2.8	0.2	37.5	32.5
Netherlands	2011	468	18.9	34.9	18.9	32.2	12.9	1.1	0.0	21.0	16.6
	2015	640	21.3	39.1	21.3	28.0	9.5	2.0	0.1	21.0	21.6
New Zealand	2011	790	12.3	33.3	12.3	39.8	12.5	2.0	0.0	11.5	13.2
	2015	892	13.4	32.5	13.4	36.6	14.4	2.3	0.9	14.9	11.7
Northern Ireland	2011	500	19.0	30.9	19.0	31.3	18.0	0.8	0.0	15.4	22.2
	2015	445	17.6	36.2	17.6	27.4	18.6	0.2	0.0	18.7	16.4
Oman	2011	1484	53.6	17.8	53.6	17.0	9.4	1.7	0.6	57.2	50.2
	2015	1289	65.3	10.0	65.3	15.3	7.4	1.4	0.7	67.9	62.7
Portugal	2011	584	22.8	31.3	22.8	32.5	11.2	2.2	0.0	21.6	23.8
	2015	661	28.2	34.6	28.2	21.6	14.1	1.4	0.1	30.4	26.2
Qatar	2011	587	47.0	18.8	47.0	18.7	12.9	2.1	0.5	51.1	43.2
	2015	740	54.6	16.7	54.6	17.2	8.9	1.6	1.0	55.2	54.0
Russian Federation	2011	648	44.5	31.7	44.5	16.6	6.0	1.0	0.2	45.4	43.7
	2015	707	47.2	24.4	47.2	17.8	8.9	1.6	0.2	50.4	44.2
Saudi Arabia	2011	672	44.2	29.3	44.2	16.3	8.5	1.0	0.7	45.5	42.8
	2015	615	46.5	22.1	46.5	19.9	8.6	1.6	1.4	51.4	42.2
Serbia	2011	628	39.3	25.1	39.3	18.4	13.3	2.9	1.1	42.4	36.0
	2015	573	55.2	19.7	55.2	11.1	11.3	2.4	0.3	59.9	50.2
Singapore	2011	906	87.0	7.6	87.0	3.8	1.6	0.0	0.0	88.0	86.0
	2015	930	90.8	5.1	90.8	2.7	1.2	0.2	0.0	91.9	89.7
Slovak Republic	2011	796	15.5	36.9	15.5	40.0	6.2	1.4	0.0	14.7	16.2
	2015	820	20.0	41.6	20.0	31.4	4.5	2.3	0.3	17.1	22.8
Slovenia	2011	643	25.9	32.2	25.9	30.0	9.4	2.3	0.2	23.2	28.7
	2015	633	29.8	25.6	29.8	32.7	10.0	1.7	0.2	28.0	31.8
Spain	2011	594	39.6	32.3	39.6	17.8	7.7	2.7	0.0	33.2	46.2
	2015	1120	40.1	27.8	40.1	17.1	12.6	2.2	0.3	38.8	41.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_02 (\$051051): Life Science / Knowing Type: MC Key: B
Label: Main function of leaves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	47.2	18.7	47.2	19.5	12.4	1.9	0.1	47.4	47.1
	2015	594	48.6	21.8	48.6	16.8	9.3	2.9	0.5	46.5	50.8
Turkey	2011	1080	31.8	34.2	31.8	20.3	13.5	0.2	0.0	30.8	32.8
	2015	933	27.3	35.9	27.3	18.9	17.1	0.8	0.0	28.4	26.2
United Arab Emirates	2011	2079	51.7	19.1	51.7	20.1	6.1	2.5	0.6	54.3	49.0
	2015	3004	58.0	16.2	58.0	16.2	6.7	2.5	0.3	60.6	55.8
United States	2011	1789	40.4	22.7	40.4	25.3	9.9	1.2	0.5	37.8	43.1
	2015	1430	43.6	23.1	43.6	22.9	8.4	1.5	0.5	40.2	47.0

International Avg (n=40)	2011	30279	36.9	28.2	36.9	22.8	9.9	1.9	0.3	37.3	36.5
	2015	30641	39.4	25.9	39.4	22.1	10.2	1.9	0.4	39.9	39.0

Ontario, Canada	2011	649	37.2	26.4	37.2	23.9	10.0	2.0	0.4	37.1	37.4
	2015	658	36.1	25.2	36.1	24.4	11.0	2.0	1.3	33.1	38.7
Quebec, Canada	2011	617	12.3	41.0	12.3	26.6	17.9	2.2	0.0	14.5	9.9
	2015	403	14.9	36.6	14.9	31.6	16.6	0.3	0.0	13.3	16.8
Norway (4)	2011	445	14.4	29.0	14.4	42.6	12.2	1.3	0.5	13.4	15.3
	2015	590	11.1	35.0	11.1	37.3	11.5	3.2	1.9	11.6	10.5
Abu Dhabi, UAE	2011	591	49.1	18.8	49.1	24.9	4.6	2.3	0.4	52.4	45.8
	2015	708	51.4	17.7	51.4	17.9	8.6	3.8	0.6	54.3	48.8
Dubai, UAE	2011	867	56.3	19.5	56.3	15.1	6.2	2.3	0.6	57.2	55.5
	2015	1050	66.1	14.7	66.1	12.3	5.6	1.2	0.1	66.8	65.5
Florida, US	2011	375	46.7	20.4	46.7	23.9	8.8	0.2	0.0	45.7	47.6
	2015	289	51.5	16.5	51.5	23.5	6.9	1.0	0.7	53.2	50.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_03Z (S051138Z): Life Science / Knowing Type: CR 1 Point
Label: Cockatoo's features (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	49.1	49.1	1.9	0.0	49.1	50.3	47.9
	2015	865	50.3	47.1	1.9	0.7	50.3	53.3	47.7
Bahrain	2011	579	33.9	58.5	7.2	0.4	33.9	32.9	34.9
	2015	592	31.2	66.0	2.7	0.1	31.2	29.4	32.9
Belgium (Flemish)	2011	689	40.9	57.9	1.0	0.2	40.9	38.5	43.7
	2015	778	40.5	57.7	1.6	0.3	40.5	40.4	40.5
Chile	2011	784	38.5	57.5	3.0	1.0	38.5	41.1	36.1
	2015	686	39.2	57.2	2.9	0.7	39.2	43.7	34.9
Chinese Taipei	2011	622	57.0	42.4	0.5	0.2	57.0	64.7	50.4
	2015	618	61.6	38.0	0.4	0.0	61.6	64.7	58.6
Croatia	2011	657	46.4	49.9	3.7	0.0	46.4	49.1	44.1
	2015	575	59.7	38.1	1.7	0.5	59.7	58.4	60.9
Czech Republic	2011	652	39.8	58.1	2.1	0.0	39.8	41.0	38.8
	2015	750	44.8	53.8	1.3	0.1	44.8	47.1	42.6
Denmark	2011	553	37.5	53.8	7.7	1.0	37.5	36.7	38.3
	2015	516	46.1	48.9	3.9	1.1	46.1	49.8	42.8
England	2011	496	50.9	47.4	1.5	0.2	50.9	54.6	47.4
	2015	578	55.4	41.0	3.2	0.3	55.4	57.8	52.9
Finland	2011	659	56.1	43.3	0.6	0.0	56.1	60.9	51.5
	2015	716	48.3	48.7	2.2	0.8	48.3	57.2	40.6
Georgia	2011	698	21.7	64.0	11.8	2.4	21.7	23.6	20.0
	2015	553	31.0	58.5	8.6	1.9	31.0	31.0	31.1
Germany	2011	575	45.7	52.9	1.1	0.3	45.7	46.1	45.3
	2015	567	44.4	53.7	1.5	0.5	44.4	47.2	41.5
Hong Kong SAR	2011	562	71.6	28.1	0.2	0.0	71.6	72.0	71.2
	2015	507	68.6	30.4	0.9	0.1	68.6	72.8	65.0
Hungary	2011	747	47.6	50.7	1.7	0.0	47.6	50.9	44.0
	2015	722	49.1	49.1	1.4	0.4	49.1	48.0	50.0
Iran, Islamic Rep. of	2011	818	16.9	67.2	15.5	0.3	16.9	16.7	17.2
	2015	545	17.5	71.1	9.6	1.9	17.5	19.5	15.6
Ireland	2011	649	43.9	54.6	1.2	0.3	43.9	48.9	38.8
	2015	615	51.5	47.8	0.5	0.2	51.5	52.1	51.0
Italy	2011	592	37.6	59.6	2.5	0.3	37.6	40.0	35.0
	2015	621	39.3	57.6	2.9	0.1	39.3	41.0	37.4
Japan	2011	625	56.5	42.6	0.8	0.1	56.5	61.2	51.8
	2015	618	52.3	44.3	3.3	0.0	52.3	55.3	49.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_03Z (S051138Z): Life Science / Knowing Type: CR 1 Point
Label: Cockatoo's features (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	25.5	64.1	9.7	0.7	25.5	20.8	30.4
	2015	670	40.4	57.6	1.8	0.3	40.4	40.1	40.7
Korea, Rep. of	2011	617	64.3	34.7	0.9	0.0	64.3	66.3	62.3
	2015	668	63.0	36.5	0.4	0.1	63.0	62.6	63.3
Kuwait	2011	573	22.3	63.6	12.7	1.4	22.3	20.7	24.3
	2015	505	22.6	67.5	7.8	2.1	22.6	25.4	19.8
Lithuania	2011	659	52.9	45.8	1.3	0.0	52.9	59.9	47.0
	2015	640	51.8	46.6	1.4	0.2	51.8	56.6	47.2
Morocco	2011	1115	22.0	66.7	9.8	1.5	22.0	21.0	23.0
	2015	601	27.6	62.9	8.9	0.6	27.6	28.1	27.2
Netherlands	2011	468	58.9	40.5	0.6	0.0	58.9	63.0	53.9
	2015	640	49.8	49.3	0.8	0.1	49.8	50.9	48.6
New Zealand	2011	790	38.9	55.6	5.4	0.0	38.9	40.8	37.1
	2015	894	46.9	48.8	3.3	1.1	46.9	52.3	41.4
Northern Ireland	2011	500	50.3	48.1	1.6	0.0	50.3	58.2	43.3
	2015	403	52.3	47.3	0.4	0.0	52.3	55.1	48.7
Oman	2011	1484	18.7	67.5	13.2	0.6	18.7	19.7	17.8
	2015	1283	22.4	70.6	6.2	0.8	22.4	20.4	24.5
Portugal	2011	584	47.1	51.0	1.9	0.0	47.1	43.8	50.1
	2015	662	43.4	54.5	1.8	0.4	43.4	43.6	43.1
Qatar	2011	587	24.6	62.9	11.7	0.8	24.6	27.3	22.1
	2015	740	33.4	59.1	6.3	1.2	33.4	36.6	29.8
Russian Federation	2011	648	46.2	50.0	3.7	0.2	46.2	47.5	44.9
	2015	707	53.7	43.7	2.4	0.2	53.7	61.1	46.9
Saudi Arabia	2011	666	28.0	63.9	7.3	0.8	28.0	31.3	24.4
	2015	610	25.0	57.9	15.7	1.4	25.0	29.5	20.9
Serbia	2011	628	46.3	47.7	4.9	1.1	46.3	44.8	47.9
	2015	571	56.4	40.1	3.2	0.3	56.4	59.3	53.4
Singapore	2011	906	62.0	37.3	0.8	0.0	62.0	64.4	59.6
	2015	931	66.4	33.3	0.3	0.0	66.4	70.2	62.5
Slovak Republic	2011	796	43.8	50.9	5.3	0.0	43.8	52.6	35.7
	2015	820	42.7	52.4	4.6	0.3	42.7	48.6	37.0
Slovenia	2011	644	42.9	55.6	1.4	0.2	42.9	45.9	39.7
	2015	633	51.0	47.1	1.6	0.3	51.0	52.0	49.8
Spain	2011	594	39.0	58.5	2.5	0.0	39.0	36.8	41.3
	2015	1120	41.5	55.8	2.4	0.3	41.5	45.0	37.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_03Z (S051138Z): Life Science / Knowing Type: CR 1 Point
Label: Cockatoo's features (DERIVED)

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	44.9	52.4	2.6	0.1	44.9	50.3	40.6
	2015	595	46.5	50.8	2.0	0.7	46.5	52.8	40.9
Turkey	2011	1080	25.0	69.5	5.5	0.0	25.0	25.4	24.5
	2015	933	27.5	70.0	2.5	0.0	27.5	28.2	26.8
United Arab Emirates	2011	2078	28.7	64.7	5.8	0.8	28.7	30.9	26.4
	2015	3005	37.0	58.5	4.1	0.4	37.0	40.0	34.4
United States	2011	1789	55.4	41.6	2.4	0.6	55.4	58.8	51.9
	2015	1430	58.9	37.8	2.7	0.5	58.9	63.5	54.3

International Avg (n=40)	2011	30281	42.0	53.3	4.4	0.4	42.0	44.0	40.1
	2015	30483	44.8	51.4	3.3	0.5	44.8	47.3	42.4

Ontario, Canada	2011	649	45.2	52.0	2.4	0.4	45.2	50.6	39.6
	2015	658	46.3	49.7	2.5	1.6	46.3	48.6	44.2
Quebec, Canada	2011	617	38.4	60.1	1.5	0.0	38.4	43.2	33.1
	2015	404	45.2	54.6	0.2	0.0	45.2	48.7	41.1
Norway (4)	2011	445	34.6	60.3	4.6	0.5	34.6	39.8	30.2
	2015	590	45.0	49.4	3.6	2.0	45.0	50.5	38.7
Abu Dhabi, UAE	2011	591	25.4	67.3	6.7	0.6	25.4	29.4	21.5
	2015	708	33.1	61.4	4.7	0.8	33.1	37.1	29.4
Dubai, UAE	2011	866	34.6	59.4	5.5	0.6	34.6	35.6	33.7
	2015	1051	49.8	48.4	1.7	0.1	49.8	51.9	47.9
Florida, US	2011	375	55.4	42.4	2.2	0.0	55.4	57.0	53.8
	2015	289	57.9	39.0	2.5	0.7	57.9	68.2	49.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_04 (S051194): Life Science / Reasoning Type: CR 1 Point
Label: Test design for plant seedlings

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	26.4	72.2	1.3	0.1	26.4	32.0	20.9
	2015	864	26.3	71.6	1.0	1.1	26.3	28.7	24.2
Bahrain	2011	579	17.3	79.9	2.3	0.5	17.3	23.8	11.0
	2015	592	19.2	71.2	8.9	0.7	19.2	25.9	13.0
Belgium (Flemish)	2011	689	29.1	70.6	0.1	0.2	29.1	32.6	25.1
	2015	778	30.0	68.5	1.1	0.3	30.0	36.8	22.9
Chile	2011	784	14.7	81.5	2.6	1.1	14.7	17.3	12.5
	2015	686	12.9	81.6	4.0	1.5	12.9	15.0	10.9
Chinese Taipei	2011	622	40.6	32.5	26.5	0.3	40.6	47.0	35.2
	2015	618	20.9	78.8	0.3	0.0	20.9	22.3	19.5
Croatia	2011	657	10.6	89.1	0.3	0.0	10.6	13.2	8.5
	2015	575	21.0	59.2	19.3	0.5	21.0	22.4	19.6
Czech Republic	2011	652	21.8	75.5	2.6	0.2	21.8	28.5	15.9
	2015	750	34.3	63.5	2.1	0.1	34.3	39.3	29.5
Denmark	2011	553	27.7	69.4	1.7	1.2	27.7	29.8	25.6
	2015	516	33.5	62.1	3.1	1.2	33.5	44.9	23.7
England	2011	496	28.7	69.9	1.2	0.2	28.7	35.3	22.4
	2015	578	30.2	69.0	0.5	0.3	30.2	33.5	26.6
Finland	2011	659	31.5	68.2	0.2	0.0	31.5	41.3	22.0
	2015	712	30.1	67.9	1.3	0.7	30.1	32.8	27.8
Georgia	2011	699	22.3	72.1	3.0	2.6	22.3	25.2	19.6
	2015	553	12.8	82.4	2.5	2.3	12.8	15.4	10.4
Germany	2011	575	22.3	76.9	0.5	0.3	22.3	28.2	16.3
	2015	567	21.5	76.6	1.4	0.5	21.5	28.1	15.1
Hong Kong SAR	2011	562	25.6	74.2	0.2	0.0	25.6	28.3	23.1
	2015	507	37.6	60.6	1.6	0.1	37.6	42.9	33.2
Hungary	2011	747	28.4	70.4	1.2	0.0	28.4	31.9	24.6
	2015	722	30.9	67.6	1.0	0.6	30.9	34.6	27.6
Iran, Islamic Rep. of	2011	818	18.4	78.3	2.6	0.7	18.4	23.0	13.8
	2015	546	18.1	76.0	2.9	3.0	18.1	22.7	14.0
Ireland	2011	649	29.0	69.0	1.7	0.3	29.0	36.2	21.6
	2015	615	32.7	66.7	0.3	0.2	32.7	37.1	28.9
Italy	2011	591	10.9	87.7	1.1	0.3	10.9	12.3	9.4
	2015	620	13.5	84.7	1.6	0.2	13.5	18.9	8.5
Japan	2011	625	44.6	54.6	0.7	0.1	44.6	53.0	36.3
	2015	618	49.0	50.4	0.6	0.0	49.0	56.3	42.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_04 (S051194): Life Science / Reasoning Type: CR 1 Point
Label: Test design for plant seedlings

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	621	24.7	56.8	17.0	1.5	24.7	25.6	23.7
	2015	670	26.4	48.0	25.3	0.3	26.4	33.5	19.9
Korea, Rep. of	2011	617	37.6	62.0	0.3	0.0	37.6	39.0	36.3
	2015	668	37.9	61.8	0.2	0.1	37.9	40.4	35.7
Kuwait	2011	589	4.8	86.4	6.0	2.7	4.8	6.2	3.3
	2015	510	6.1	83.1	8.2	2.6	6.1	9.5	2.6
Lithuania	2011	659	23.4	75.1	1.5	0.0	23.4	30.3	17.5
	2015	640	24.8	73.1	1.8	0.3	24.8	31.3	18.6
Morocco	2011	1131	0.8	89.7	7.3	2.3	0.8	1.2	0.3
	2015	712	6.0	89.4	3.5	1.1	6.0	9.6	2.8
Netherlands	2011	468	40.6	58.4	0.7	0.2	40.6	42.5	38.1
	2015	640	33.5	62.3	4.1	0.1	33.5	36.7	29.9
New Zealand	2011	790	23.9	74.0	1.9	0.2	23.9	28.8	19.2
	2015	892	24.7	72.7	1.6	1.0	24.7	26.9	22.4
Northern Ireland	2011	500	20.3	78.7	1.0	0.0	20.3	24.7	16.5
	2015	451	19.3	80.1	0.3	0.3	19.3	23.3	14.5
Oman	2011	1484	6.1	91.2	1.7	1.0	6.1	9.4	3.1
	2015	1289	11.3	84.9	3.0	0.8	11.3	13.1	9.5
Portugal	2011	584	14.7	85.2	0.1	0.0	14.7	16.1	13.4
	2015	661	12.6	86.3	0.4	0.6	12.6	16.2	9.4
Qatar	2011	587	13.3	82.9	3.0	0.8	13.3	15.4	11.3
	2015	740	13.1	82.7	2.7	1.5	13.1	15.7	10.2
Russian Federation	2011	648	19.6	79.4	0.9	0.2	19.6	25.1	14.4
	2015	707	19.5	79.8	0.5	0.2	19.5	23.7	15.7
Saudi Arabia	2011	676	12.2	84.8	2.2	0.8	12.2	15.1	9.0
	2015	617	11.7	81.0	5.5	1.8	11.7	19.3	4.9
Serbia	2011	628	19.5	77.2	2.3	1.1	19.5	25.8	12.8
	2015	571	23.2	72.6	3.9	0.3	23.2	25.8	20.4
Singapore	2011	906	52.3	47.6	0.1	0.0	52.3	60.2	44.5
	2015	930	60.0	40.0	0.0	0.0	60.0	64.4	55.4
Slovak Republic	2011	796	19.0	79.6	1.2	0.1	19.0	24.7	13.9
	2015	820	14.9	82.6	1.5	0.9	14.9	17.5	12.4
Slovenia	2011	645	21.6	76.0	2.3	0.2	21.6	23.4	19.7
	2015	633	30.8	56.5	12.2	0.6	30.8	34.1	27.2
Spain	2011	594	14.2	83.6	2.2	0.0	14.2	17.6	10.8
	2015	1119	21.8	75.1	2.7	0.4	21.8	23.8	19.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_04 (S051194): Life Science / Reasoning Type: CR 1 Point
Label: Test design for plant seedlings

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	29.4	69.4	0.9	0.2	29.4	33.7	26.0
	2015	594	31.4	66.7	1.1	0.9	31.4	36.9	26.0
Turkey	2011	1080	16.3	83.1	0.6	0.0	16.3	21.0	11.7
	2015	933	17.9	81.7	0.4	0.0	17.9	21.7	13.7
United Arab Emirates	2011	2079	11.6	85.7	1.7	1.1	11.6	16.4	6.7
	2015	3005	16.5	80.7	2.3	0.5	16.5	18.8	14.5
United States	2011	1789	37.5	60.3	1.5	0.7	37.5	39.4	35.6
	2015	1430	41.4	56.1	1.8	0.7	41.4	45.9	36.9

International Avg (n=40)	2011	30324	22.8	74.0	2.7	0.5	22.8	27.0	18.8
	2015	30649	24.5	71.4	3.4	0.7	24.5	28.6	20.5

Ontario, Canada	2011	649	27.9	70.1	1.1	0.9	27.9	34.9	20.6
	2015	658	26.3	71.3	0.7	1.8	26.3	27.2	25.4
Quebec, Canada	2011	617	18.0	81.2	0.8	0.0	18.0	19.3	16.6
	2015	404	16.3	82.6	1.1	0.1	16.3	17.3	15.1
Norway (4)	2011	445	23.2	74.9	1.5	0.5	23.2	28.2	18.9
	2015	590	22.8	72.9	2.4	2.0	22.8	25.6	19.5
Abu Dhabi, UAE	2011	591	11.3	86.6	1.3	0.9	11.3	16.7	5.9
	2015	708	10.9	85.9	2.3	0.9	10.9	13.6	8.6
Dubai, UAE	2011	867	16.4	81.2	1.6	0.9	16.4	20.0	13.1
	2015	1051	28.9	70.1	0.8	0.2	28.9	32.3	25.9
Florida, US	2011	375	43.6	55.0	1.4	0.0	43.6	45.7	41.2
	2015	289	43.9	53.3	2.1	0.7	43.9	52.3	36.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_05 (S051029): Life Science / Reasoning Type: MC Key: C
Label: Dinosaurs had feathers

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	44.4	15.9	22.1	44.4	15.5	1.8	0.3	44.5	44.3
	2015	864	44.0	14.5	22.8	44.0	15.8	1.9	1.1	40.0	47.4
Bahrain	2011	579	42.8	9.1	26.4	42.8	19.0	2.1	0.6	45.2	40.4
	2015	592	40.7	7.1	30.6	40.7	18.4	2.3	1.0	41.2	40.1
Belgium (Flemish)	2011	689	38.8	11.7	32.2	38.8	16.4	0.7	0.2	36.2	41.7
	2015	778	44.9	9.0	28.9	44.9	15.2	1.6	0.3	44.1	45.8
Chile	2011	784	35.2	6.3	21.5	35.2	33.6	1.9	1.5	32.8	37.3
	2015	686	39.3	10.4	18.4	39.3	27.0	2.9	2.0	35.8	42.6
Chinese Taipei	2011	622	49.2	14.6	17.4	49.2	17.6	0.9	0.3	49.3	49.1
	2015	618	50.7	11.6	17.9	50.7	18.0	1.8	0.0	49.6	51.8
Croatia	2011	657	36.5	4.8	26.9	36.5	28.9	2.9	0.0	30.6	41.5
	2015	575	29.3	5.5	32.9	29.3	29.4	2.3	0.7	30.2	28.4
Czech Republic	2011	652	33.7	19.4	21.8	33.7	20.7	4.2	0.2	31.3	35.9
	2015	750	41.9	15.9	15.3	41.9	24.9	1.9	0.1	35.4	48.1
Denmark	2011	553	43.5	13.0	26.9	43.5	11.4	4.0	1.2	37.6	49.5
	2015	516	44.9	15.6	26.1	44.9	8.9	3.0	1.4	41.0	48.3
England	2011	496	33.6	17.2	22.2	33.6	24.4	2.1	0.4	30.8	36.3
	2015	578	36.2	12.1	25.0	36.2	23.8	2.1	0.7	36.9	35.5
Finland	2011	659	51.8	1.7	31.3	51.8	14.7	0.6	0.0	45.6	57.9
	2015	712	42.6	2.4	29.5	42.6	22.1	2.4	1.0	44.4	41.0
Georgia	2011	699	50.0	8.4	17.4	50.0	16.9	4.5	2.9	50.6	49.4
	2015	553	46.6	6.8	18.7	46.6	22.1	3.5	2.3	50.2	43.3
Germany	2011	575	40.9	6.7	24.6	40.9	24.5	3.1	0.3	37.5	44.4
	2015	567	40.6	7.2	23.9	40.6	22.5	5.0	0.8	34.3	46.6
Hong Kong SAR	2011	562	43.3	11.5	20.7	43.3	23.9	0.6	0.0	34.8	51.2
	2015	507	48.1	11.3	17.6	48.1	21.3	1.6	0.1	48.6	47.7
Hungary	2011	747	45.2	14.5	16.9	45.2	20.1	2.9	0.4	41.9	49.0
	2015	722	48.7	15.4	13.2	48.7	17.8	4.0	1.0	43.4	53.3
Iran, Islamic Rep. of	2011	818	29.6	16.7	17.1	29.6	31.7	4.1	0.9	26.5	32.8
	2015	546	24.8	15.2	15.3	24.8	33.4	8.1	3.1	24.4	25.2
Ireland	2011	649	35.3	14.2	23.7	35.3	24.8	1.7	0.3	32.7	37.9
	2015	615	36.8	16.5	23.6	36.8	21.8	1.0	0.2	35.6	37.9
Italy	2011	592	57.0	2.9	17.0	57.0	19.5	3.2	0.4	55.0	59.1
	2015	620	59.9	1.9	16.7	59.9	16.9	4.3	0.2	58.1	61.4
Japan	2011	625	48.7	15.3	20.0	48.7	15.0	1.0	0.1	45.6	51.6
	2015	618	44.0	16.3	23.6	44.0	14.7	1.4	0.0	43.8	44.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_05 (S051029): Life Science / Reasoning Type: MC Key: C
Label: Dinosaurs had feathers

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	29.5	19.5	14.8	29.5	31.4	3.2	1.6	24.4	34.8
	2015	670	38.2	13.8	14.5	38.2	32.0	1.0	0.5	37.7	38.6
Korea, Rep. of	2011	617	60.4	6.9	20.2	60.4	11.7	0.8	0.0	56.8	64.1
	2015	668	57.5	7.9	22.7	57.5	11.4	0.4	0.1	54.9	59.9
Kuwait	2011	584	29.5	10.5	31.1	29.5	20.0	5.7	3.1	31.4	27.3
	2015	511	32.3	14.7	25.5	32.3	15.9	8.1	3.5	35.7	28.8
Lithuania	2011	659	53.9	5.9	19.7	53.9	19.1	1.5	0.0	51.0	56.3
	2015	640	50.3	5.5	19.3	50.3	22.0	2.5	0.5	45.8	54.6
Morocco	2011	1089	23.7	15.3	33.9	23.7	19.1	4.6	3.3	24.8	22.7
	2015	703	37.0	10.0	25.3	37.0	23.5	2.5	1.7	40.3	34.2
Netherlands	2011	468	47.9	6.5	30.7	47.9	13.8	0.9	0.2	45.4	51.5
	2015	640	48.8	6.5	32.9	48.8	10.3	1.3	0.2	41.6	56.6
New Zealand	2011	790	39.0	12.6	21.6	39.0	24.1	2.6	0.2	38.0	39.9
	2015	892	38.8	18.1	19.1	38.8	21.1	1.9	1.0	36.0	41.7
Northern Ireland	2011	500	40.0	11.9	26.5	40.0	20.4	1.2	0.0	33.7	45.5
	2015	446	39.8	11.0	30.5	39.8	17.9	0.8	0.0	39.1	40.5
Oman	2011	1484	31.7	16.2	30.5	31.7	16.2	4.3	1.1	30.3	33.0
	2015	1288	38.7	15.1	22.0	38.7	20.6	2.5	1.1	38.9	38.5
Portugal	2011	584	51.3	7.9	24.8	51.3	14.3	1.7	0.0	45.8	56.1
	2015	661	48.8	8.8	26.3	48.8	12.5	2.9	0.6	48.9	48.7
Qatar	2011	587	34.5	14.1	28.4	34.5	19.5	2.6	0.8	31.5	37.3
	2015	740	41.4	12.3	23.7	41.4	18.4	2.6	1.6	43.6	39.0
Russian Federation	2011	648	36.2	8.0	20.7	36.2	33.8	1.2	0.2	33.6	38.6
	2015	707	35.5	11.2	20.1	35.5	29.2	4.0	0.2	31.6	39.0
Saudi Arabia	2011	676	33.8	8.4	33.0	33.8	21.5	2.2	1.1	32.9	34.8
	2015	616	33.3	9.8	31.2	33.3	18.7	4.6	2.5	38.9	28.3
Serbia	2011	628	37.2	1.8	12.6	37.2	42.1	4.6	1.7	36.1	38.4
	2015	571	46.4	2.5	13.2	46.4	31.8	5.5	0.8	42.9	50.0
Singapore	2011	906	72.5	7.2	12.4	72.5	7.9	0.1	0.0	72.6	72.3
	2015	930	71.5	8.3	13.3	71.5	6.7	0.1	0.0	69.0	74.1
Slovak Republic	2011	796	38.2	12.7	18.3	38.2	28.6	2.1	0.1	38.5	37.9
	2015	820	35.4	14.2	18.3	35.4	29.2	2.0	0.9	33.4	37.4
Slovenia	2011	645	39.9	9.2	28.0	39.9	20.5	2.2	0.3	37.5	42.3
	2015	633	46.4	11.1	18.8	46.4	19.6	3.5	0.7	41.8	51.4
Spain	2011	594	38.1	9.2	19.0	38.1	29.4	4.2	0.1	31.6	44.8
	2015	1120	47.4	4.8	20.0	47.4	24.4	2.9	0.6	44.3	51.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_05 (S051029): Life Science / Reasoning Type: MC Key: C
Label: Dinosaurs had feathers

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	27.0	12.1	26.4	27.0	30.6	3.6	0.2	22.5	30.6
	2015	594	33.6	13.2	26.7	33.6	22.7	2.8	0.9	26.5	40.3
Turkey	2011	1080	37.2	9.6	21.0	37.2	31.0	1.2	0.0	37.4	36.9
	2015	933	52.8	8.2	19.5	52.8	18.3	1.2	0.0	53.4	52.1
United Arab Emirates	2011	2078	38.8	11.8	27.4	38.8	18.7	2.1	1.2	39.0	38.6
	2015	3005	42.8	11.8	23.1	42.8	18.6	3.0	0.7	43.9	41.9
United States	2011	1789	51.7	14.8	19.7	51.7	11.0	2.1	0.7	48.3	55.1
	2015	1430	53.7	13.8	20.0	53.7	8.8	2.8	1.0	50.2	57.2

International Avg (n=40)	2011	30278	41.3	10.9	23.2	41.3	21.6	2.4	0.7	38.8	43.7
	2015	30635	43.4	10.7	22.1	43.4	20.2	2.8	0.9	41.9	44.8

Ontario, Canada	2011	649	40.1	16.7	20.4	40.1	20.4	1.2	1.1	39.3	41.0
	2015	658	45.0	17.2	18.1	45.0	16.6	1.1	2.0	43.1	46.8
Quebec, Canada	2011	617	29.1	17.1	20.9	29.1	31.7	1.0	0.2	27.3	31.1
	2015	403	29.1	13.7	22.9	29.1	33.8	0.3	0.2	32.8	25.0
Norway (4)	2011	445	40.8	5.3	17.3	40.8	34.1	2.0	0.5	37.2	43.9
	2015	590	35.3	7.7	20.4	35.3	31.3	2.8	2.5	31.5	39.5
Abu Dhabi, UAE	2011	591	36.5	11.9	29.1	36.5	19.6	2.1	0.9	35.7	37.3
	2015	708	41.2	10.3	24.0	41.2	19.1	4.5	0.9	43.2	39.5
Dubai, UAE	2011	866	40.8	14.9	25.3	40.8	16.0	1.9	1.1	40.2	41.3
	2015	1051	50.4	13.1	18.7	50.4	15.5	1.9	0.4	50.0	50.7
Florida, US	2011	375	60.2	13.2	16.7	60.2	7.8	2.0	0.0	56.8	63.8
	2015	289	57.1	11.7	20.2	57.1	7.2	2.9	0.9	59.6	54.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_06 (S051077): Physical Science / Knowing Type: CR 1 Point
Label: What happened to metal bench

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	65.0	29.8	4.5	0.8	65.0	64.1	65.8
	2015	864	67.1	29.2	2.6	1.1	67.1	65.7	68.2
Bahrain	2011	579	39.8	49.3	10.3	0.6	39.8	43.2	36.5
	2015	592	34.7	55.9	8.1	1.3	34.7	37.8	31.8
Belgium (Flemish)	2011	689	53.6	42.7	3.5	0.2	53.6	49.8	58.0
	2015	778	45.6	48.4	5.6	0.3	45.6	37.8	53.8
Chile	2011	784	58.7	32.7	7.1	1.5	58.7	53.7	63.1
	2015	687	58.0	30.8	8.3	2.9	58.0	52.7	63.2
Chinese Taipei	2011	622	73.0	22.3	4.4	0.3	73.0	71.2	74.6
	2015	618	68.8	28.0	3.1	0.1	68.8	66.3	71.3
Croatia	2011	657	62.1	32.0	5.7	0.2	62.1	57.6	65.8
	2015	575	62.9	30.2	6.3	0.7	62.9	55.8	69.7
Czech Republic	2011	652	73.1	20.2	6.3	0.4	73.1	69.6	76.2
	2015	750	73.0	21.2	5.2	0.6	73.0	67.5	78.4
Denmark	2011	553	73.2	21.6	3.8	1.3	73.2	67.9	78.6
	2015	516	77.0	17.4	3.2	2.4	77.0	72.8	80.6
England	2011	496	67.0	29.4	3.2	0.4	67.0	66.1	67.8
	2015	578	64.2	32.2	3.0	0.7	64.2	63.9	64.5
Finland	2011	659	86.1	10.6	3.3	0.0	86.1	86.6	85.7
	2015	712	77.6	15.6	5.6	1.2	77.6	76.6	78.4
Georgia	2011	698	50.8	36.1	9.7	3.4	50.8	49.8	51.7
	2015	553	42.2	44.5	10.8	2.5	42.2	35.6	48.3
Germany	2011	575	80.3	16.0	3.3	0.3	80.3	77.9	82.8
	2015	567	75.0	17.0	7.1	1.0	75.0	71.8	78.0
Hong Kong SAR	2011	562	40.9	50.4	8.4	0.2	40.9	41.7	40.2
	2015	507	44.5	48.7	6.6	0.1	44.5	39.7	48.6
Hungary	2011	744	73.1	21.8	4.6	0.5	73.1	69.6	77.0
	2015	722	74.0	20.2	4.6	1.2	74.0	70.0	77.5
Iran, Islamic Rep. of	2011	818	32.0	55.8	11.3	0.9	32.0	31.5	32.4
	2015	546	25.6	56.0	13.7	4.7	25.6	22.0	29.0
Ireland	2011	649	71.3	24.2	4.3	0.3	71.3	72.0	70.6
	2015	615	75.3	23.0	1.4	0.2	75.3	76.2	74.5
Italy	2011	592	62.2	30.3	6.9	0.7	62.2	60.6	63.8
	2015	618	56.2	33.0	9.6	1.2	56.2	54.2	58.3
Japan	2011	625	73.2	24.9	1.8	0.1	73.2	74.2	72.1
	2015	618	66.4	30.2	2.9	0.5	66.4	58.4	73.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_06 (S051077): Physical Science / Knowing Type: CR 1 Point
Label: What happened to metal bench

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	55.1	34.7	8.2	2.1	55.1	49.2	61.3
	2015	670	53.4	40.4	5.7	0.5	53.4	50.0	56.5
Korea, Rep. of	2011	617	53.1	43.8	3.1	0.0	53.1	50.8	55.6
	2015	668	62.5	36.5	0.9	0.1	62.5	59.0	65.7
Kuwait	2011	589	25.1	41.4	30.0	3.5	25.1	26.4	23.6
	2015	503	9.2	49.6	36.8	4.4	9.2	10.0	8.3
Lithuania	2011	659	65.5	30.9	3.6	0.0	65.5	63.8	67.0
	2015	640	68.3	27.4	3.8	0.5	68.3	63.5	72.9
Morocco	2011	1130	8.1	45.0	43.4	3.5	8.1	7.8	8.4
	2015	718	11.6	64.1	22.0	2.3	11.6	11.0	12.2
Netherlands	2011	468	66.9	31.1	1.8	0.2	66.9	62.7	72.2
	2015	640	56.5	38.9	4.3	0.2	56.5	55.7	57.3
New Zealand	2011	790	68.9	26.5	4.1	0.4	68.9	66.1	71.7
	2015	892	67.3	29.4	2.2	1.1	67.3	67.0	67.6
Northern Ireland	2011	500	78.6	19.4	2.0	0.0	78.6	82.5	75.1
	2015	451	78.3	19.7	1.7	0.3	78.3	78.7	77.8
Oman	2011	1484	12.9	62.9	22.8	1.5	12.9	13.5	12.3
	2015	1290	17.8	70.1	10.9	1.2	17.8	16.2	19.5
Portugal	2011	584	49.4	45.6	5.0	0.0	49.4	45.1	53.2
	2015	661	49.5	42.5	7.1	1.0	49.5	48.4	50.5
Qatar	2011	587	14.2	69.2	15.7	0.8	14.2	13.2	15.1
	2015	740	27.7	56.6	13.8	1.9	27.7	31.4	23.5
Russian Federation	2011	648	78.5	17.7	3.6	0.2	78.5	73.3	83.4
	2015	707	77.1	18.1	4.2	0.5	77.1	73.7	80.2
Saudi Arabia	2011	676	45.1	44.6	9.2	1.1	45.1	48.5	41.4
	2015	616	31.0	44.4	21.6	3.0	31.0	36.4	26.1
Serbia	2011	628	80.8	14.9	2.7	1.7	80.8	78.4	83.3
	2015	571	75.5	16.8	6.6	1.1	75.5	72.6	78.6
Singapore	2011	906	51.9	45.9	2.2	0.0	51.9	45.8	57.9
	2015	930	54.4	43.8	1.8	0.0	54.4	51.7	57.2
Slovak Republic	2011	796	80.7	14.4	4.7	0.2	80.7	78.3	82.9
	2015	820	73.2	18.4	7.3	1.1	73.2	72.6	73.7
Slovenia	2011	645	58.3	34.2	7.2	0.3	58.3	57.9	58.8
	2015	633	69.6	24.6	4.6	1.2	69.6	67.2	72.2
Spain	2011	594	58.0	33.3	8.4	0.3	58.0	51.7	64.6
	2015	1120	59.7	34.8	4.8	0.8	59.7	56.6	63.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_06 (S051077): Physical Science / Knowing Type: CR 1 Point
Label: What happened to metal bench

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	76.3	18.6	4.6	0.5	76.3	72.4	79.4
	2015	594	77.4	18.0	2.8	1.7	77.4	77.6	77.7
Turkey	2011	1080	25.1	69.0	5.8	0.0	25.1	23.8	26.4
	2015	933	23.6	71.2	5.2	0.0	23.6	24.1	23.1
United Arab Emirates	2011	2079	22.4	60.7	15.6	1.3	22.4	21.4	23.4
	2015	3005	25.2	58.9	15.0	0.8	25.2	24.6	25.8
United States	2011	1789	62.7	34.9	1.5	0.9	62.7	59.7	65.7
	2015	1430	59.2	37.0	2.5	1.3	59.2	57.7	60.6

International Avg (n=40)	2011	30321	56.8	34.7	7.7	0.8	56.8	55.0	58.6
	2015	30648	55.4	36.1	7.3	1.2	55.4	53.3	57.5

Ontario, Canada	2011	649	63.0	32.8	3.0	1.1	63.0	58.2	68.0
	2015	658	57.4	37.3	3.2	2.1	57.4	52.3	61.9
Quebec, Canada	2011	617	60.5	35.7	3.6	0.2	60.5	58.6	62.5
	2015	404	58.0	38.2	3.6	0.2	58.0	56.6	59.5
Norway (4)	2011	445	71.0	22.3	6.2	0.5	71.0	72.5	69.7
	2015	590	54.5	33.4	9.0	3.0	54.5	58.6	50.0
Abu Dhabi, UAE	2011	591	21.6	62.6	14.8	1.1	21.6	20.0	23.2
	2015	708	23.6	57.7	17.4	1.2	23.6	22.6	24.6
Dubai, UAE	2011	867	25.2	59.5	14.1	1.2	25.2	27.1	23.4
	2015	1051	36.2	54.8	8.5	0.5	36.2	35.7	36.6
Florida, US	2011	375	65.5	33.9	0.6	0.0	65.5	61.1	70.1
	2015	289	64.4	32.3	2.0	1.3	64.4	65.6	63.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_07 (\$051200): Physical Science / Applying Type: CR 1 Point
Label: Metal and wooden spoon in soup

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	8.9	84.0	6.0	1.0	8.9	8.1	9.7
	2015	864	10.9	84.9	2.8	1.3	10.9	6.2	15.1
Bahrain	2011	579	29.9	61.0	8.1	1.0	29.9	32.1	27.7
	2015	592	34.1	56.8	7.4	1.7	34.1	37.3	31.1
Belgium (Flemish)	2011	689	5.6	90.1	4.1	0.2	5.6	3.5	7.9
	2015	778	25.2	68.9	5.5	0.4	25.2	25.1	25.3
Chile	2011	784	2.8	86.4	8.9	1.9	2.8	1.7	3.7
	2015	687	2.0	83.5	10.6	3.9	2.0	2.0	2.1
Chinese Taipei	2011	622	15.3	76.7	7.7	0.3	15.3	14.0	16.4
	2015	618	15.0	79.0	5.9	0.1	15.0	11.7	18.2
Croatia	2011	657	7.5	81.7	10.6	0.2	7.5	3.9	10.4
	2015	575	28.5	60.8	10.1	0.7	28.5	28.2	28.7
Czech Republic	2011	652	8.8	76.7	14.1	0.4	8.8	6.8	10.6
	2015	750	21.0	68.4	9.5	1.1	21.0	18.4	23.6
Denmark	2011	553	19.5	73.1	6.1	1.3	19.5	17.8	21.1
	2015	516	30.0	60.8	6.2	3.0	30.0	31.7	28.5
England	2011	496	26.7	68.8	4.1	0.4	26.7	27.4	26.0
	2015	578	17.2	79.3	2.3	1.2	17.2	13.9	20.8
Finland	2011	659	23.3	73.6	3.1	0.0	23.3	18.4	28.0
	2015	712	18.2	74.0	6.1	1.7	18.2	17.3	19.0
Georgia	2011	698	37.1	50.7	8.2	3.9	37.1	37.9	36.5
	2015	553	38.7	51.4	7.0	3.0	38.7	37.7	39.5
Germany	2011	575	17.3	73.1	8.9	0.6	17.3	15.2	19.5
	2015	567	18.8	68.9	11.1	1.1	18.8	17.4	20.3
Hong Kong SAR	2011	562	55.4	39.4	5.0	0.2	55.4	47.9	62.4
	2015	507	51.5	44.7	3.6	0.1	51.5	46.6	55.7
Hungary	2011	747	9.4	83.8	6.0	0.7	9.4	6.5	12.7
	2015	722	21.2	72.5	5.1	1.2	21.2	20.0	22.3
Iran, Islamic Rep. of	2011	818	6.7	79.5	12.3	1.5	6.7	7.2	6.2
	2015	546	2.3	75.9	16.1	5.7	2.3	1.1	3.5
Ireland	2011	649	15.9	78.0	5.7	0.3	15.9	19.0	12.7
	2015	615	25.3	71.8	2.6	0.2	25.3	25.7	24.9
Italy	2011	592	18.9	71.2	8.8	1.2	18.9	17.9	19.9
	2015	619	21.4	66.2	11.0	1.5	21.4	16.0	26.5
Japan	2011	625	52.9	45.4	1.6	0.1	52.9	57.2	48.5
	2015	618	51.4	45.9	2.1	0.6	51.4	50.9	51.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_07 (S051200): Physical Science / Applying Type: CR 1 Point
Label: Metal and wooden spoon in soup

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	43.6	45.9	7.7	2.8	43.6	41.7	45.6
	2015	670	63.1	31.8	4.6	0.6	63.1	61.1	64.9
Korea, Rep. of	2011	617	92.0	7.7	0.3	0.0	92.0	94.3	89.7
	2015	668	28.7	70.7	0.5	0.1	28.7	28.6	28.8
Kuwait	2011	589	15.7	49.0	30.7	4.5	15.7	18.3	12.6
	2015	503	15.5	46.1	32.3	6.1	15.5	15.5	15.5
Lithuania	2011	659	33.9	62.4	3.5	0.1	33.9	33.6	34.2
	2015	640	44.5	51.7	3.3	0.5	44.5	46.2	42.7
Morocco	2011	1130	8.8	45.9	40.4	4.8	8.8	9.6	8.1
	2015	718	24.9	55.0	17.1	3.0	24.9	23.6	25.9
Netherlands	2011	468	11.0	87.2	1.5	0.2	11.0	7.9	15.0
	2015	640	13.8	81.4	4.4	0.4	13.8	14.1	13.4
New Zealand	2011	790	9.2	86.7	3.7	0.4	9.2	8.1	10.3
	2015	892	10.0	85.3	3.6	1.1	10.0	8.5	11.4
Northern Ireland	2011	500	15.1	80.2	4.6	0.0	15.1	14.3	15.9
	2015	451	11.8	85.8	2.0	0.4	11.8	12.8	10.6
Oman	2011	1484	10.8	68.6	18.7	1.9	10.8	10.8	10.7
	2015	1290	35.2	52.5	11.0	1.4	35.2	35.0	35.4
Portugal	2011	584	6.2	87.9	5.9	0.0	6.2	4.1	8.0
	2015	661	3.9	85.4	8.4	2.3	3.9	3.2	4.4
Qatar	2011	587	20.3	62.7	15.3	1.7	20.3	19.8	20.8
	2015	740	22.0	64.5	11.7	1.9	22.0	26.8	16.6
Russian Federation	2011	648	29.5	67.6	2.8	0.2	29.5	23.3	35.3
	2015	707	40.9	55.5	3.0	0.5	40.9	41.0	40.8
Saudi Arabia	2011	676	16.6	69.2	12.0	2.2	16.6	15.4	17.9
	2015	617	24.4	50.6	21.6	3.4	24.4	30.9	18.6
Serbia	2011	628	36.4	58.1	3.8	1.7	36.4	36.2	36.7
	2015	571	41.4	47.2	9.5	1.8	41.4	38.3	44.7
Singapore	2011	906	86.8	12.0	1.1	0.1	86.8	85.3	88.2
	2015	930	86.4	13.0	0.5	0.0	86.4	86.9	85.9
Slovak Republic	2011	796	33.1	56.9	9.7	0.2	33.1	34.8	31.6
	2015	820	12.3	76.1	10.3	1.3	12.3	8.7	15.8
Slovenia	2011	645	29.3	62.5	7.9	0.3	29.3	27.4	31.3
	2015	633	34.0	57.6	6.9	1.4	34.0	30.3	38.0
Spain	2011	594	25.0	63.9	10.6	0.5	25.0	21.9	28.3
	2015	1120	14.5	76.5	8.1	0.9	14.5	10.9	18.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_07 (S051200): Physical Science / Applying Type: CR 1 Point
Label: Metal and wooden spoon in soup

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT

Sweden	2011	624	17.3	72.8	9.2	0.7	17.3	13.9	20.1
	2015	594	24.7	66.5	6.8	2.0	24.7	19.4	29.7
Turkey	2011	1080	13.5	80.9	5.6	0.0	13.5	13.6	13.5
	2015	933	28.8	66.8	4.1	0.2	28.8	31.0	26.5
United Arab Emirates	2011	2079	14.9	68.2	15.2	1.7	14.9	15.7	14.1
	2015	3005	16.6	68.5	13.8	1.1	16.6	16.7	16.6
United States	2011	1789	15.5	81.4	1.8	1.2	15.5	11.2	20.0
	2015	1430	18.2	77.8	2.5	1.6	18.2	15.5	20.8

International Avg (n=40)	2011	30324	23.7	66.8	8.5	1.0	23.7	22.6	24.7
	2015	30650	26.2	64.5	7.8	1.5	26.2	25.3	27.1

Ontario, Canada	2011	649	4.8	89.7	4.1	1.4	4.8	5.6	4.0
	2015	658	13.7	79.7	4.4	2.2	13.7	11.2	16.0
Quebec, Canada	2011	617	4.9	88.1	6.7	0.2	4.9	3.2	6.7
	2015	404	10.5	84.8	4.3	0.4	10.5	4.5	17.4
Norway (4)	2011	445	4.1	83.7	10.2	2.0	4.1	2.0	5.9
	2015	590	13.9	71.5	10.9	3.7	13.9	17.2	10.2
Abu Dhabi, UAE	2011	591	15.9	69.4	13.0	1.6	15.9	16.4	15.4
	2015	708	14.3	67.7	16.3	1.7	14.3	14.5	14.2
Dubai, UAE	2011	867	12.2	73.1	13.2	1.4	12.2	13.0	11.5
	2015	1051	25.7	67.4	6.4	0.6	25.7	24.7	26.5
Florida, US	2011	375	21.5	77.8	0.8	0.0	21.5	16.4	26.8
	2015	289	19.0	77.2	2.5	1.3	19.0	22.7	15.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_08 (S051075): Physical Science / Applying Type: CR 1 Point
Label: Pushing two boxes

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	74.6	19.4	4.7	1.3	74.6	75.2	74.0
	2015	864	66.9	26.6	5.1	1.3	66.9	67.8	66.2
Bahrain	2011	579	45.6	44.5	8.6	1.2	45.6	49.6	41.8
	2015	592	47.6	43.1	7.5	1.7	47.6	50.6	44.9
Belgium (Flemish)	2011	689	72.5	22.4	4.9	0.2	72.5	70.1	75.2
	2015	778	67.6	23.9	7.9	0.5	67.6	69.2	66.0
Chile	2011	784	59.6	28.7	9.5	2.2	59.6	60.6	58.7
	2015	687	52.8	34.5	8.5	4.2	52.8	55.9	49.8
Chinese Taipei	2011	622	82.9	13.1	3.8	0.3	82.9	86.4	79.8
	2015	618	85.4	10.5	4.0	0.1	85.4	86.8	84.0
Croatia	2011	657	64.8	20.9	14.1	0.2	64.8	64.8	64.9
	2015	575	71.2	17.7	10.4	0.8	71.2	70.2	72.1
Czech Republic	2011	652	72.9	13.4	13.0	0.6	72.9	77.3	69.0
	2015	750	74.1	17.3	7.3	1.3	74.1	75.5	72.7
Denmark	2011	553	71.8	18.1	8.6	1.5	71.8	70.7	73.0
	2015	516	68.9	19.5	7.9	3.8	68.9	71.2	66.8
England	2011	496	74.8	20.1	4.6	0.5	74.8	74.5	75.1
	2015	578	75.5	21.0	2.3	1.2	75.5	75.6	75.5
Finland	2011	659	71.5	20.4	8.1	0.0	71.5	72.1	70.8
	2015	712	59.1	31.7	7.3	1.9	59.1	63.4	55.4
Georgia	2011	698	59.6	19.2	16.9	4.3	59.6	57.4	61.7
	2015	553	55.1	30.2	11.2	3.4	55.1	52.8	57.3
Germany	2011	575	66.4	22.0	10.8	0.8	66.4	70.4	62.3
	2015	567	61.3	23.1	14.0	1.6	61.3	65.8	56.9
Hong Kong SAR	2011	562	56.7	33.6	9.5	0.2	56.7	57.5	55.9
	2015	507	77.4	17.8	4.6	0.1	77.4	77.8	77.1
Hungary	2011	747	73.7	18.5	6.9	0.8	73.7	72.4	75.1
	2015	722	71.0	22.3	4.7	1.9	71.0	69.9	72.0
Iran, Islamic Rep. of	2011	818	47.1	36.3	14.4	2.2	47.1	48.9	45.3
	2015	546	32.3	50.2	11.2	6.2	32.3	32.2	32.5
Ireland	2011	649	73.9	20.2	5.6	0.3	73.9	75.3	72.3
	2015	615	76.3	20.5	2.8	0.4	76.3	72.5	79.6
Italy	2011	592	68.9	20.7	9.2	1.2	68.9	68.6	69.2
	2015	620	71.3	16.8	10.3	1.6	71.3	70.3	72.2
Japan	2011	625	85.2	11.6	3.1	0.1	85.2	86.5	83.8
	2015	618	84.6	11.0	3.6	0.8	84.6	86.0	83.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_08 (S051075): Physical Science / Applying Type: CR 1 Point
Label: Pushing two boxes

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	47.6	36.5	12.9	3.0	47.6	49.0	46.0
	2015	670	67.7	25.4	6.3	0.6	67.7	66.1	69.2
Korea, Rep. of	2011	617	71.9	24.1	4.0	0.0	71.9	72.4	71.4
	2015	668	74.6	23.1	2.1	0.1	74.6	75.0	74.3
Kuwait	2011	590	21.0	51.4	22.7	5.0	21.0	22.5	19.2
	2015	511	23.3	46.3	24.2	6.2	23.3	27.0	19.6
Lithuania	2011	659	67.0	23.6	9.3	0.1	67.0	67.4	66.6
	2015	640	67.9	22.2	9.3	0.6	67.9	65.0	70.7
Morocco	2011	1129	11.6	53.1	30.3	5.0	11.6	12.5	10.7
	2015	715	18.8	58.5	19.6	3.2	18.8	20.6	17.2
Netherlands	2011	468	73.7	24.3	1.8	0.2	73.7	72.5	75.4
	2015	640	69.1	26.1	3.9	0.9	69.1	69.7	68.5
New Zealand	2011	790	72.3	23.5	3.5	0.7	72.3	72.6	72.0
	2015	892	66.6	25.8	6.3	1.4	66.6	66.9	66.2
Northern Ireland	2011	500	77.2	17.3	4.7	0.8	77.2	78.0	76.4
	2015	451	73.4	22.9	3.3	0.4	73.4	71.5	75.6
Oman	2011	1484	24.4	58.0	15.6	2.0	24.4	27.0	22.1
	2015	1290	41.0	45.5	11.8	1.7	41.0	41.8	40.3
Portugal	2011	584	71.4	25.1	3.4	0.1	71.4	72.2	70.7
	2015	661	66.4	24.4	6.5	2.7	66.4	67.5	65.4
Qatar	2011	587	33.1	49.7	15.2	2.1	33.1	35.7	30.7
	2015	740	37.1	48.5	11.8	2.6	37.1	41.4	32.3
Russian Federation	2011	648	77.5	17.1	4.9	0.5	77.5	74.8	80.1
	2015	707	78.4	15.6	5.5	0.5	78.4	79.0	77.9
Saudi Arabia	2011	676	51.7	37.3	8.5	2.5	51.7	56.3	46.7
	2015	616	26.5	51.9	17.8	3.8	26.5	34.1	19.6
Serbia	2011	628	61.3	28.9	7.9	1.9	61.3	58.4	64.3
	2015	571	66.8	18.5	10.9	3.8	66.8	67.4	66.2
Singapore	2011	906	83.8	14.0	2.0	0.1	83.8	83.8	83.8
	2015	930	83.3	15.3	1.4	0.0	83.3	81.7	85.0
Slovak Republic	2011	796	65.5	24.3	10.0	0.2	65.5	70.9	60.5
	2015	820	62.3	26.1	10.0	1.6	62.3	62.8	61.9
Slovenia	2011	645	65.6	26.3	7.7	0.4	65.6	65.5	65.7
	2015	633	68.3	25.2	4.8	1.8	68.3	66.9	69.7
Spain	2011	594	60.4	28.2	10.4	0.9	60.4	55.9	65.1
	2015	1120	73.0	20.7	5.3	1.1	73.0	70.6	75.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_08 (S051075): Physical Science / Applying Type: CR 1 Point
Label: Pushing two boxes

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	81.6	12.5	5.2	0.7	81.6	80.7	82.3
	2015	594	85.6	7.9	3.7	2.7	85.6	86.3	85.0
Turkey	2011	1080	56.8	36.4	6.6	0.2	56.8	57.3	56.3
	2015	933	62.2	32.4	5.2	0.3	62.2	64.1	60.1
United Arab Emirates	2011	2079	41.9	40.6	15.6	1.9	41.9	43.1	40.8
	2015	3005	45.9	40.0	12.8	1.2	45.9	47.9	44.2
United States	2011	1789	73.6	24.1	1.0	1.3	73.6	71.9	75.3
	2015	1430	73.7	21.6	2.6	2.1	73.7	72.0	75.3

International Avg (n=40)	2011	30324	62.8	27.0	9.0	1.2	62.8	63.5	62.2
	2015	30655	63.3	27.0	7.9	1.8	63.3	64.0	62.6

Ontario, Canada	2011	649	75.6	18.4	4.2	1.8	75.6	75.8	75.4
	2015	658	71.0	22.1	4.1	2.7	71.0	72.9	69.4
Quebec, Canada	2011	617	69.1	23.8	6.2	0.9	69.1	69.6	68.6
	2015	404	74.5	19.4	5.3	0.8	74.5	72.1	77.4
Norway (4)	2011	445	51.4	34.0	11.3	3.4	51.4	50.8	51.9
	2015	590	55.6	31.3	8.6	4.5	55.6	58.8	52.0
Abu Dhabi, UAE	2011	591	36.7	46.9	14.7	1.6	36.7	37.1	36.3
	2015	708	42.1	44.4	11.8	1.7	42.1	44.5	39.8
Dubai, UAE	2011	867	54.3	30.8	13.4	1.5	54.3	54.8	53.8
	2015	1051	62.9	28.7	7.8	0.6	62.9	65.4	60.6
Florida, US	2011	375	77.1	21.9	0.7	0.3	77.1	74.1	80.3
	2015	289	74.9	20.6	2.8	1.6	74.9	81.0	69.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_09 (\$051065): Physical Science / Applying Type: MC Key: B
Label: What can fill gap in flashlight

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	70.9	11.6	70.9	9.3	5.4	1.1	1.7	68.8	73.0
	2015	864	65.4	11.3	65.4	12.0	4.5	4.5	2.4	64.9	65.8
Bahrain	2011	579	58.6	11.3	58.6	17.1	10.0	1.2	1.9	54.2	62.8
	2015	592	57.0	8.7	57.0	18.7	12.3	1.1	2.1	55.6	58.3
Belgium (Flemish)	2011	689	76.4	5.8	76.4	10.4	6.2	0.8	0.4	71.4	82.2
	2015	778	78.5	5.0	78.5	10.9	3.9	1.2	0.5	76.2	80.8
Chile	2011	784	55.5	10.3	55.5	20.1	9.5	1.5	3.2	51.2	59.2
	2015	685	55.0	12.1	55.0	15.2	10.4	2.7	4.7	48.4	61.3
Chinese Taipei	2011	622	89.3	1.8	89.3	3.6	4.3	0.5	0.4	90.0	88.7
	2015	618	85.6	3.0	85.6	6.4	4.3	0.5	0.1	85.1	86.2
Croatia	2011	657	73.1	6.3	73.1	14.1	4.5	1.6	0.4	70.5	75.3
	2015	575	81.8	3.2	81.8	8.9	4.3	1.0	0.8	77.7	85.7
Czech Republic	2011	652	69.7	3.8	69.7	18.2	6.2	1.0	1.2	63.9	74.7
	2015	750	72.4	4.1	72.4	15.1	5.5	1.5	1.5	66.4	78.2
Denmark	2011	553	80.1	1.2	80.1	11.6	3.1	2.4	1.7	77.6	82.6
	2015	516	79.8	1.9	79.8	9.6	2.7	2.1	4.0	73.9	84.8
England	2011	496	78.2	5.5	78.2	8.6	4.1	2.3	1.3	76.6	79.7
	2015	578	79.4	6.9	79.4	8.1	3.3	0.9	1.3	79.1	79.7
Finland	2011	659	83.7	2.2	83.7	11.1	1.4	0.9	0.8	77.8	89.4
	2015	712	77.3	3.0	77.3	11.4	3.8	2.1	2.4	79.5	75.4
Georgia	2011	699	52.4	14.9	52.4	15.9	8.7	2.6	5.5	46.5	57.8
	2015	553	49.2	15.6	49.2	16.4	11.8	3.3	3.8	46.7	51.6
Germany	2011	575	89.4	3.3	89.4	3.0	2.5	0.6	1.2	88.9	89.9
	2015	567	83.1	3.9	83.1	4.9	3.5	2.7	1.9	81.5	84.6
Hong Kong SAR	2011	562	74.2	5.5	74.2	14.2	4.6	1.1	0.5	69.8	78.3
	2015	507	78.1	5.3	78.1	12.4	4.0	0.1	0.1	72.9	82.6
Hungary	2011	747	67.8	9.0	67.8	13.4	7.4	1.3	1.0	59.3	77.2
	2015	722	65.4	7.0	65.4	16.7	6.3	1.9	2.7	60.0	70.1
Iran, Islamic Rep. of	2011	818	56.0	10.6	56.0	20.2	8.1	1.8	3.3	53.5	58.4
	2015	546	50.7	11.1	50.7	17.8	8.9	4.6	6.9	49.6	51.7
Ireland	2011	649	74.0	8.9	74.0	11.0	5.3	0.4	0.4	73.0	75.0
	2015	615	77.3	7.6	77.3	7.4	5.8	1.3	0.6	77.4	77.2
Italy	2011	592	60.6	8.4	60.6	19.7	8.6	1.3	1.4	56.4	65.1
	2015	620	62.6	6.9	62.6	17.1	10.1	1.5	1.7	57.2	67.5
Japan	2011	625	90.0	0.8	90.0	7.2	1.9	0.0	0.1	91.4	88.5
	2015	618	86.4	1.8	86.4	7.4	2.6	0.5	1.4	87.0	85.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_09 (S051065): Physical Science / Applying Type: MC Key: B
Label: What can fill gap in flashlight

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	59.1	9.4	59.1	19.9	4.8	2.4	4.4	51.0	67.5
	2015	670	72.9	6.9	72.9	14.3	3.8	1.5	0.7	69.4	76.1
Korea, Rep. of	2011	617	83.5	1.8	83.5	11.7	2.8	0.2	0.0	83.7	83.4
	2015	668	77.7	2.4	77.7	15.7	3.8	0.3	0.1	73.3	81.7
Kuwait	2011	583	44.8	15.7	44.8	19.2	9.2	4.9	6.2	46.2	43.2
	2015	511	36.9	20.0	36.9	15.8	13.7	5.6	8.0	38.8	34.9
Lithuania	2011	659	68.6	10.7	68.6	10.2	8.8	1.4	0.3	58.7	77.2
	2015	640	70.5	8.5	70.5	11.9	7.2	1.1	0.8	62.6	78.1
Morocco	2011	1092	44.6	12.9	44.6	22.1	11.7	2.7	6.1	41.8	47.3
	2015	712	56.2	11.2	56.2	16.2	10.7	2.3	3.4	53.6	58.3
Netherlands	2011	468	88.2	1.1	88.2	7.5	2.5	0.4	0.2	86.5	90.7
	2015	640	77.7	3.7	77.7	12.3	3.6	1.2	1.5	76.8	78.8
New Zealand	2011	790	71.2	11.4	71.2	8.7	6.9	0.8	1.0	71.5	71.0
	2015	892	66.6	9.3	66.6	10.8	6.4	5.1	1.7	61.7	71.5
Northern Ireland	2011	500	73.3	10.2	73.3	10.6	4.4	0.5	1.0	73.0	73.5
	2015	442	64.9	12.7	64.9	15.8	6.6	0.0	0.0	62.8	67.4
Oman	2011	1484	55.7	12.4	55.7	19.7	8.0	1.8	2.5	54.8	56.5
	2015	1290	68.5	7.8	68.5	11.4	7.9	2.2	2.2	65.9	71.2
Portugal	2011	584	72.1	6.4	72.1	10.6	9.0	1.8	0.1	70.1	73.8
	2015	661	64.5	9.3	64.5	10.3	8.9	3.3	3.7	61.5	67.1
Qatar	2011	587	53.6	12.2	53.6	19.4	11.2	1.1	2.5	51.8	55.3
	2015	740	59.9	12.9	59.9	12.5	9.8	1.9	3.0	60.8	58.8
Russian Federation	2011	648	78.6	5.3	78.6	9.7	5.2	0.7	0.5	70.5	86.1
	2015	707	74.3	5.8	74.3	12.7	5.5	1.0	0.7	74.3	74.3
Saudi Arabia	2011	675	53.9	17.4	53.9	15.3	9.7	0.8	2.8	51.3	56.7
	2015	614	41.0	18.8	41.0	22.7	11.4	2.1	4.1	43.8	38.4
Serbia	2011	628	68.0	4.5	68.0	17.4	6.4	1.7	2.0	70.1	65.8
	2015	573	68.8	8.2	68.8	12.6	3.0	3.0	4.4	69.0	68.5
Singapore	2011	906	78.1	5.8	78.1	12.4	3.2	0.2	0.3	72.2	83.8
	2015	930	80.5	4.9	80.5	9.2	5.0	0.4	0.1	79.1	81.9
Slovak Republic	2011	796	79.0	4.9	79.0	10.2	4.3	0.9	0.6	77.1	80.8
	2015	820	71.4	7.1	71.4	12.5	6.2	0.4	2.3	65.1	77.5
Slovenia	2011	645	74.4	7.4	74.4	10.7	5.0	1.9	0.8	64.9	84.2
	2015	633	75.8	5.2	75.8	9.4	4.9	2.7	2.1	70.4	81.6
Spain	2011	594	58.7	8.8	58.7	19.6	9.5	1.9	1.5	55.5	62.0
	2015	1120	59.8	8.6	59.8	14.9	13.7	0.9	2.1	57.5	62.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_09 (S051065): Physical Science / Applying Type: MC Key: B
Label: What can fill gap in flashlight

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	76.6	4.5	76.6	12.9	3.5	1.4	1.0	76.0	77.2
	2015	594	79.4	4.5	79.4	7.3	2.5	3.1	3.1	82.3	76.7
Turkey	2011	1080	59.5	11.2	59.5	21.0	7.5	0.6	0.3	56.9	62.0
	2015	932	62.4	9.7	62.4	17.8	8.6	0.9	0.7	58.8	66.3
United Arab Emirates	2011	2078	53.9	13.2	53.9	15.8	12.0	2.7	2.3	52.5	55.3
	2015	3005	60.9	12.8	60.9	14.2	8.0	2.5	1.4	61.2	60.7
United States	2011	1789	78.0	5.0	78.0	9.7	4.1	1.8	1.5	75.0	81.1
	2015	1430	75.7	6.2	75.7	10.4	2.8	1.8	3.0	70.9	80.5

International Avg (n=40)	2011	30279	69.3	7.8	69.3	13.6	6.3	1.4	1.6	66.3	72.3
	2015	30640	68.8	7.9	68.8	12.7	6.6	1.9	2.2	66.5	71.0

Ontario, Canada	2011	649	69.6	10.9	69.6	11.4	5.1	0.8	2.3	66.5	72.8
	2015	657	66.6	10.7	66.6	10.5	6.3	2.2	3.8	62.2	70.5
Quebec, Canada	2011	617	64.8	9.9	64.8	17.1	6.5	0.6	1.0	60.3	69.5
	2015	403	56.7	10.4	56.7	17.1	12.1	2.0	1.7	50.6	63.7
Norway (4)	2011	445	64.9	8.1	64.9	15.2	6.2	1.2	4.3	66.9	63.2
	2015	590	62.0	6.5	62.0	17.7	5.2	3.1	5.5	59.9	64.4
Abu Dhabi, UAE	2011	591	51.6	12.9	51.6	15.7	15.3	2.4	2.2	50.3	53.0
	2015	708	57.9	13.4	57.9	14.5	9.7	2.5	2.0	58.1	57.8
Dubai, UAE	2011	866	60.3	15.0	60.3	12.2	8.5	2.2	1.7	58.8	61.8
	2015	1051	74.2	8.9	74.2	9.4	5.1	1.6	0.9	71.9	76.3
Florida, US	2011	375	74.1	9.2	74.1	11.5	3.1	1.8	0.3	69.3	79.1
	2015	289	67.1	12.3	67.1	11.9	5.6	1.0	2.1	65.4	68.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_10 (S051191): Earth Science / Applying Type: MC Key: A
Label: Getting wet from low clouds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	55.0	55.0	7.3	4.4	29.0	2.5	1.9	57.5	52.4
	2015	864	49.3	49.3	4.9	5.6	31.9	5.3	3.0	49.9	48.7
Bahrain	2011	579	34.5	34.5	11.3	9.8	40.0	2.5	1.9	37.2	32.0
	2015	592	32.6	32.6	13.4	11.2	37.3	3.1	2.5	29.7	35.2
Belgium (Flemish)	2011	689	38.1	38.1	5.3	5.9	48.0	2.1	0.6	35.0	41.7
	2015	778	42.5	42.5	7.0	4.6	42.9	2.2	0.9	39.8	45.3
Chile	2011	784	35.1	35.1	9.2	5.9	45.3	1.1	3.5	35.8	34.5
	2015	685	35.1	35.1	8.6	6.7	41.3	3.1	5.3	31.6	38.4
Chinese Taipei	2011	622	60.0	60.0	3.2	2.1	33.5	0.4	0.8	59.7	60.2
	2015	618	60.4	60.4	3.3	2.1	33.3	0.8	0.1	56.3	64.5
Croatia	2011	657	21.6	21.6	2.8	2.5	71.3	1.1	0.6	15.3	26.9
	2015	575	28.1	28.1	2.8	3.1	62.8	2.4	0.8	29.9	26.4
Czech Republic	2011	652	56.7	56.7	6.0	4.4	29.3	2.4	1.3	55.2	58.1
	2015	750	55.9	55.9	7.3	4.7	28.1	2.2	1.8	49.0	62.6
Denmark	2011	553	71.1	71.1	2.8	1.8	20.0	2.3	2.0	67.9	74.4
	2015	516	68.1	68.1	1.5	1.0	21.6	2.6	5.2	65.3	70.5
England	2011	496	53.1	53.1	5.1	3.0	34.2	1.8	2.9	53.0	53.3
	2015	578	51.5	51.5	4.1	2.9	39.1	1.0	1.3	48.0	55.2
Finland	2011	659	72.9	72.9	2.0	1.6	21.6	1.0	0.9	69.1	76.6
	2015	712	66.6	66.6	3.9	1.3	23.0	2.4	2.8	67.1	66.2
Georgia	2011	699	43.7	43.7	2.8	5.0	39.7	2.5	6.4	46.5	41.1
	2015	553	41.8	41.8	6.0	6.7	37.9	3.2	4.4	42.2	41.4
Germany	2011	575	67.2	67.2	3.6	2.6	23.3	1.8	1.5	63.4	71.0
	2015	567	62.1	62.1	3.3	2.1	27.0	3.3	2.2	64.5	59.6
Hong Kong SAR	2011	562	63.9	63.9	4.5	1.9	28.1	0.6	1.1	58.8	68.5
	2015	507	63.3	63.3	2.8	1.6	31.0	1.2	0.1	56.3	69.3
Hungary	2011	747	48.4	48.4	3.0	2.8	41.9	2.4	1.6	42.3	55.1
	2015	722	50.3	50.3	5.9	2.6	35.5	2.4	3.3	48.4	51.9
Iran, Islamic Rep. of	2011	818	25.4	25.4	8.7	7.6	50.4	3.6	4.3	22.2	28.6
	2015	546	22.8	22.8	7.9	4.9	50.7	5.8	7.8	19.8	25.6
Ireland	2011	649	53.4	53.4	5.2	2.0	36.6	2.1	0.6	53.4	53.4
	2015	615	53.4	53.4	2.8	2.5	38.4	2.3	0.6	51.9	54.8
Italy	2011	592	45.9	45.9	5.0	4.2	41.9	1.5	1.5	46.1	45.6
	2015	620	45.8	45.8	3.9	2.9	42.9	2.7	1.8	45.9	45.5
Japan	2011	625	66.2	66.2	2.2	1.1	30.0	0.4	0.1	59.3	73.1
	2015	618	57.7	57.7	3.2	0.9	35.8	1.0	1.4	55.6	59.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_10 (S051191): Earth Science / Applying Type: MC Key: A
Label: Getting wet from low clouds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	41.8	41.8	6.0	5.0	39.0	2.2	5.9	36.5	47.4
	2015	670	48.2	48.2	2.9	6.1	40.1	1.7	0.9	47.9	48.5
Korea, Rep. of	2011	617	82.3	82.3	1.5	1.2	14.8	0.2	0.0	78.2	86.7
	2015	668	75.8	75.8	2.1	1.2	20.6	0.2	0.1	76.2	75.5
Kuwait	2011	581	23.2	23.2	18.7	14.7	31.9	4.4	7.1	28.4	16.7
	2015	511	23.7	23.7	15.4	12.5	31.0	9.2	8.2	24.9	22.4
Lithuania	2011	659	64.1	64.1	4.1	3.6	26.3	1.3	0.7	62.1	65.7
	2015	640	52.5	52.5	5.5	2.7	36.0	2.4	0.9	45.3	59.4
Morocco	2011	1093	23.0	23.0	18.0	22.7	26.2	3.2	6.9	22.9	23.3
	2015	706	27.5	27.5	20.2	19.0	27.2	2.4	3.6	28.7	26.6
Netherlands	2011	468	49.9	49.9	4.4	2.8	41.1	1.1	0.6	42.8	58.6
	2015	640	40.6	40.6	5.3	5.4	45.0	1.9	1.8	40.6	40.6
New Zealand	2011	790	48.0	48.0	5.4	4.3	39.3	1.8	1.2	46.9	49.2
	2015	892	42.6	42.6	7.3	4.6	36.5	7.0	2.0	41.8	43.4
Northern Ireland	2011	500	51.5	51.5	4.4	4.0	37.3	1.3	1.4	53.1	50.1
	2015	434	50.7	50.7	5.9	4.1	38.6	0.7	0.0	46.1	56.4
Oman	2011	1484	27.2	27.2	15.0	16.3	36.0	2.3	3.2	26.2	28.1
	2015	1289	28.1	28.1	14.8	12.7	39.3	2.4	2.7	29.8	26.4
Portugal	2011	584	40.2	40.2	4.7	2.9	50.5	1.0	0.6	38.8	41.4
	2015	661	41.1	41.1	3.3	4.3	42.5	3.4	5.4	39.1	42.8
Qatar	2011	587	29.5	29.5	14.3	13.5	38.6	1.5	2.6	31.6	27.5
	2015	740	33.6	33.6	11.8	10.4	38.0	2.7	3.5	36.7	30.2
Russian Federation	2011	648	66.1	66.1	2.5	1.7	28.0	0.6	1.0	62.7	69.4
	2015	707	71.3	71.3	1.9	1.1	22.2	2.5	1.0	67.3	75.1
Saudi Arabia	2011	675	40.3	40.3	15.4	14.2	25.3	1.4	3.3	42.4	38.1
	2015	614	34.3	34.3	14.7	15.6	26.0	4.6	4.9	35.1	33.6
Serbia	2011	628	30.9	30.9	2.8	2.4	58.7	2.6	2.7	27.3	34.6
	2015	573	27.6	27.6	2.8	1.7	55.2	7.0	5.7	24.0	31.4
Singapore	2011	906	61.0	61.0	2.6	1.9	33.9	0.2	0.4	55.8	66.0
	2015	930	59.0	59.0	1.7	2.7	35.9	0.6	0.1	57.7	60.4
Slovak Republic	2011	796	45.7	45.7	7.9	5.0	39.3	1.4	0.7	47.2	44.3
	2015	820	44.5	44.5	9.3	6.1	35.8	2.0	2.3	39.1	49.8
Slovenia	2011	641	41.7	41.7	3.5	5.9	44.5	2.3	2.1	40.5	42.8
	2015	633	39.0	39.0	4.4	4.7	44.1	4.8	3.0	34.8	43.7
Spain	2011	594	38.1	38.1	6.8	6.5	44.4	1.9	2.2	33.4	42.9
	2015	1120	39.4	39.4	6.4	5.2	44.1	2.5	2.4	37.2	42.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_10 (S051191): Earth Science / Applying Type: MC Key: A
Label: Getting wet from low clouds

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	63.4	63.4	4.0	2.0	27.0	2.6	1.1	64.2	62.7
	2015	594	65.7	65.7	2.5	2.1	24.7	1.5	3.6	69.1	62.8
Turkey	2011	1080	48.1	48.1	14.7	11.8	24.1	0.7	0.6	49.3	47.0
	2015	933	46.0	46.0	15.3	11.3	24.5	1.9	0.9	46.5	45.5
United Arab Emirates	2011	2078	32.3	32.3	10.8	8.4	42.5	2.5	3.6	31.7	32.9
	2015	3005	33.1	33.1	10.3	7.2	43.9	3.8	1.7	32.6	33.6
United States	2011	1789	61.4	61.4	4.8	5.1	24.2	2.1	2.3	58.8	64.1
	2015	1430	58.3	58.3	5.7	4.8	24.8	2.9	3.5	57.7	58.9

International Avg (n=40)	2011	30274	48.0	48.0	6.6	5.6	35.9	1.8	2.1	46.5	49.7
	2015	30626	46.8	46.8	6.6	5.3	35.9	2.9	2.6	45.2	48.2

Ontario, Canada	2011	649	57.3	57.3	3.6	3.7	30.0	2.8	2.6	54.5	60.1
	2015	658	47.9	47.9	6.4	3.4	33.9	3.2	5.1	47.6	48.2
Quebec, Canada	2011	617	39.5	39.5	4.4	3.9	49.0	2.2	1.0	35.6	43.6
	2015	402	40.3	40.3	2.2	4.4	48.1	3.3	1.7	37.7	43.4
Norway (4)	2011	445	38.5	38.5	4.5	6.1	44.5	2.0	4.4	32.5	43.5
	2015	590	35.9	35.9	4.5	2.4	46.8	3.8	6.6	37.5	34.2
Abu Dhabi, UAE	2011	591	28.8	28.8	14.0	8.7	43.5	1.8	3.1	26.2	31.4
	2015	708	29.9	29.9	11.8	7.7	43.5	4.4	2.7	27.9	31.7
Dubai, UAE	2011	866	36.6	36.6	8.3	5.6	43.9	2.6	2.9	35.7	37.5
	2015	1051	42.6	42.6	5.5	5.2	42.6	3.2	0.9	42.6	42.5
Florida, US	2011	375	69.2	69.2	4.9	3.9	18.5	2.1	1.4	68.0	70.5
	2015	289	58.9	58.9	4.2	4.8	26.8	2.1	3.1	62.8	55.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_11 (\$051099): Earth Science / Knowing Type: MC Key: C
Label: Moon in the sky for a month

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	57.5	14.7	10.4	57.5	14.1	1.1	2.1	56.2	58.8
	2015	864	55.1	14.3	11.9	55.1	13.0	2.2	3.5	56.7	53.8
Bahrain	2011	579	55.7	14.6	10.1	55.7	14.5	2.7	2.4	58.6	52.9
	2015	592	52.1	18.2	10.5	52.1	14.1	2.2	2.8	62.6	42.6
Belgium (Flemish)	2011	689	41.2	20.0	14.0	41.2	23.1	0.6	1.0	40.3	42.3
	2015	778	41.5	20.8	13.3	41.5	21.3	2.2	0.9	38.1	45.2
Chile	2011	784	51.2	18.5	11.2	51.2	10.6	4.6	3.9	52.3	50.2
	2015	685	44.6	22.7	14.1	44.6	11.4	1.4	5.8	45.8	43.4
Chinese Taipei	2011	622	85.3	5.2	3.9	85.3	4.1	0.8	0.8	89.8	81.4
	2015	618	86.7	5.0	3.3	86.7	4.1	0.8	0.1	86.3	87.0
Croatia	2011	657	50.7	12.2	12.8	50.7	21.3	2.1	0.9	52.4	49.3
	2015	575	56.6	12.3	11.6	56.6	15.7	2.3	1.4	59.1	54.1
Czech Republic	2011	652	67.3	12.6	7.5	67.3	9.4	1.7	1.6	68.3	66.5
	2015	750	67.9	12.3	7.2	67.9	9.2	1.1	2.2	68.6	67.2
Denmark	2011	553	65.2	14.2	9.6	65.2	7.0	1.8	2.3	64.3	66.1
	2015	516	60.3	14.8	6.4	60.3	10.6	2.4	5.5	58.3	62.0
England	2011	496	57.6	13.8	6.7	57.6	17.3	1.6	3.0	62.8	52.7
	2015	578	58.0	11.5	11.0	58.0	16.4	1.7	1.4	61.3	54.4
Finland	2011	659	68.7	11.8	6.2	68.7	10.3	1.4	1.5	66.2	71.1
	2015	712	62.8	11.2	6.4	62.8	13.4	3.1	3.1	67.8	58.4
Georgia	2011	699	51.2	12.5	8.5	51.2	18.5	2.4	6.9	53.1	49.4
	2015	553	46.4	15.6	11.4	46.4	17.5	3.8	5.3	47.3	45.6
Germany	2011	575	62.3	10.3	11.6	62.3	10.3	3.8	1.7	65.0	59.6
	2015	567	60.6	9.9	10.2	60.6	12.8	4.0	2.5	61.4	59.8
Hong Kong SAR	2011	562	68.1	8.2	8.7	68.1	10.9	3.1	1.1	67.4	68.8
	2015	507	72.8	9.3	6.1	72.8	10.5	0.9	0.3	73.9	71.9
Hungary	2011	747	57.4	16.5	6.7	57.4	15.9	1.8	1.8	57.6	57.1
	2015	722	56.2	15.5	8.0	56.2	14.1	2.4	3.7	54.6	57.7
Iran, Islamic Rep. of	2011	818	51.0	17.4	8.2	51.0	15.6	2.3	5.6	53.5	48.4
	2015	546	47.5	19.3	7.3	47.5	12.7	4.5	8.7	52.1	43.4
Ireland	2011	649	53.2	12.8	9.7	53.2	22.0	1.2	1.2	51.2	55.2
	2015	615	48.3	16.2	10.8	48.3	22.7	0.9	1.0	50.6	46.3
Italy	2011	592	49.4	16.5	13.8	49.4	15.5	3.0	1.9	50.4	48.4
	2015	620	45.9	17.6	10.5	45.9	20.7	2.7	2.6	49.2	43.0
Japan	2011	625	79.9	6.6	2.7	79.9	5.6	5.2	0.1	83.3	76.4
	2015	618	82.9	4.4	1.5	82.9	7.2	2.5	1.5	85.4	80.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_11 (\$051099): Earth Science / Knowing Type: MC Key: C
Label: Moon in the sky for a month

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	48.7	8.8	9.1	48.7	25.8	1.2	6.4	49.9	47.4
	2015	670	59.1	10.4	10.0	59.1	19.0	0.6	0.9	62.1	56.4
Korea, Rep. of	2011	617	81.3	8.7	3.5	81.3	5.9	0.7	0.0	83.3	79.1
	2015	668	69.7	16.3	4.5	69.7	8.9	0.4	0.1	70.9	68.6
Kuwait	2011	579	39.7	14.5	17.6	39.7	15.1	5.1	7.9	42.1	36.8
	2015	511	33.6	18.4	16.7	33.6	13.0	9.8	8.6	35.6	31.5
Lithuania	2011	659	59.5	16.4	7.7	59.5	9.7	6.0	0.7	57.9	60.9
	2015	640	56.0	21.0	8.7	56.0	11.8	1.6	1.0	57.6	54.5
Morocco	2011	1095	27.5	22.7	22.0	27.5	14.0	5.9	7.7	25.8	29.2
	2015	711	37.3	18.6	20.2	37.3	14.8	5.1	4.0	35.3	39.1
Netherlands	2011	468	55.7	15.8	9.0	55.7	17.6	1.1	0.8	54.6	56.4
	2015	640	49.4	16.2	13.5	49.4	15.3	3.5	2.0	48.4	50.5
New Zealand	2011	790	51.2	14.8	13.2	51.2	17.6	1.8	1.4	48.6	53.8
	2015	892	50.9	17.9	11.3	50.9	16.2	1.6	2.1	52.8	49.0
Northern Ireland	2011	500	47.4	17.3	9.5	47.4	23.4	0.5	2.0	50.3	44.8
	2015	440	45.7	18.9	13.1	45.7	22.0	0.3	0.0	52.4	37.7
Oman	2011	1482	40.0	21.0	16.9	40.0	14.5	3.6	4.1	38.9	41.0
	2015	1289	41.4	16.2	15.8	41.4	20.3	3.4	3.0	41.5	41.3
Portugal	2011	550	56.0	10.0	9.7	56.0	20.3	2.8	1.2	57.7	54.5
	2015	661	50.9	12.5	10.0	50.9	17.4	2.4	6.8	51.6	50.3
Qatar	2011	587	39.8	16.0	19.7	39.8	19.4	2.5	2.7	44.3	35.6
	2015	740	42.5	17.8	13.7	42.5	19.1	3.5	3.5	43.0	41.9
Russian Federation	2011	648	64.6	11.0	10.1	64.6	12.1	1.0	1.2	66.2	63.1
	2015	707	65.9	11.3	7.0	65.9	13.3	1.3	1.4	67.1	64.8
Saudi Arabia	2011	674	47.3	16.1	13.0	47.3	19.6	0.7	3.3	48.3	46.2
	2015	615	47.2	14.0	14.7	47.2	13.2	5.4	5.4	51.4	43.4
Serbia	2011	628	38.6	35.3	8.3	38.6	12.2	2.3	3.4	41.5	35.5
	2015	573	40.3	30.8	7.3	40.3	10.0	4.4	7.2	41.8	38.7
Singapore	2011	906	56.4	15.3	10.7	56.4	16.8	0.4	0.4	56.9	56.0
	2015	930	56.4	14.0	9.4	56.4	19.7	0.3	0.1	57.4	55.4
Slovak Republic	2011	796	67.0	9.9	7.0	67.0	13.0	2.1	1.0	70.7	63.6
	2015	820	67.9	7.4	7.4	67.9	12.7	1.9	2.7	67.0	68.9
Slovenia	2011	642	58.2	11.6	9.3	58.2	14.6	3.9	2.4	61.0	55.2
	2015	633	61.3	8.4	11.0	61.3	12.7	3.2	3.4	61.9	60.5
Spain	2011	594	58.7	11.0	10.0	58.7	14.4	3.4	2.5	60.2	57.1
	2015	1120	60.4	8.9	10.4	60.4	14.3	3.2	2.9	62.8	57.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S11_11 (\$051099): Earth Science / Knowing Type: MC Key: C
Label: Moon in the sky for a month

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	65.0	10.1	10.0	65.0	11.5	2.2	1.2	67.6	62.9
	2015	594	61.8	11.4	7.4	61.8	11.3	4.2	4.0	64.1	59.5
Turkey	2011	1080	50.8	15.6	8.7	50.8	23.3	1.0	0.6	51.9	49.8
	2015	933	62.0	10.1	6.8	62.0	18.4	1.7	1.1	64.7	59.0
United Arab Emirates	2011	2080	44.8	17.2	13.6	44.8	14.5	6.0	4.0	45.4	44.1
	2015	3005	51.1	15.7	13.3	51.1	14.6	3.3	2.1	53.3	49.2
United States	2011	1789	59.2	11.6	10.0	59.2	14.8	2.0	2.4	60.9	57.5
	2015	1430	56.7	14.5	9.1	56.7	12.8	2.9	3.9	59.7	53.8

International Avg (n=40)	2011	30240	55.7	14.2	10.3	55.7	14.9	2.4	2.4	56.9	54.6
	2015	30638	55.3	14.5	10.1	55.3	14.5	2.6	3.0	57.0	53.7

Ontario, Canada	2011	649	45.9	15.1	10.5	45.9	23.4	2.2	2.8	49.2	42.6
	2015	657	47.2	15.1	10.7	47.2	19.4	2.2	5.3	48.3	46.3
Quebec, Canada	2011	617	56.4	16.2	12.3	56.4	12.9	0.9	1.2	55.1	57.8
	2015	403	50.8	18.5	7.6	50.8	19.7	1.7	1.7	47.7	54.3
Norway (4)	2011	445	50.3	19.6	8.3	50.3	15.9	1.3	4.6	58.4	43.4
	2015	590	43.3	14.7	11.4	43.3	19.8	4.0	6.7	45.8	40.5
Abu Dhabi, UAE	2011	591	41.7	17.2	15.6	41.7	15.7	6.4	3.5	41.1	42.4
	2015	708	47.1	16.2	15.8	47.1	12.8	4.8	3.3	50.8	43.8
Dubai, UAE	2011	867	47.8	16.7	10.7	47.8	15.9	5.2	3.6	46.6	49.0
	2015	1051	60.0	15.3	8.9	60.0	13.2	1.3	1.2	62.7	57.7
Florida, US	2011	375	60.8	11.2	10.5	60.8	14.3	1.8	1.4	62.2	59.2
	2015	289	63.0	12.1	11.2	63.0	10.0	0.6	3.1	64.6	61.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

S11_12 (S051175): Earth Science / Applying Type: CR 1 Point
Label: X marks a town on Earth

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	872	31.5	58.0	8.0	2.5	31.5	35.0	28.1
	2015	864	8.0	80.9	7.1	4.0	8.0	6.8	9.0
Bahrain	2011	579	10.4	70.4	16.2	3.1	10.4	12.4	8.5
	2015	592	21.2	64.9	10.5	3.4	21.2	23.8	18.9
Belgium (Flemish)	2011	689	28.6	61.2	9.0	1.2	28.6	26.6	30.8
	2015	778	16.9	71.1	10.2	1.7	16.9	16.6	17.3
Chile	2011	784	12.3	63.2	17.5	6.9	12.3	12.9	11.8
	2015	685	13.9	60.8	18.7	6.6	13.9	14.8	12.9
Chinese Taipei	2011	622	17.5	71.3	10.3	0.9	17.5	21.6	14.0
	2015	618	23.3	64.3	12.1	0.4	23.3	23.5	23.1
Croatia	2011	657	18.2	58.2	22.1	1.6	18.2	15.8	20.1
	2015	575	34.4	47.4	15.6	2.7	34.4	32.7	36.0
Czech Republic	2011	652	26.6	52.2	19.1	2.1	26.6	28.9	24.6
	2015	750	21.9	63.0	12.5	2.6	21.9	28.0	16.0
Denmark	2011	553	44.3	42.0	11.1	2.5	44.3	46.5	42.1
	2015	516	38.7	45.5	9.2	6.6	38.7	39.9	37.6
England	2011	496	40.7	47.9	7.8	3.6	40.7	44.0	37.6
	2015	578	33.6	57.7	6.5	2.2	33.6	34.7	32.3
Finland	2011	659	51.1	38.7	8.0	2.2	51.1	57.6	44.8
	2015	712	45.6	39.8	10.6	4.0	45.6	54.2	38.0
Georgia	2011	699	19.0	38.7	34.6	7.7	19.0	21.3	16.8
	2015	553	12.5	49.6	30.8	7.1	12.5	13.1	12.0
Germany	2011	575	14.9	55.6	26.1	3.4	14.9	13.2	16.5
	2015	567	8.2	60.9	27.1	3.8	8.2	10.8	5.5
Hong Kong SAR	2011	562	36.3	48.4	12.0	3.3	36.3	35.0	37.6
	2015	507	36.2	55.9	7.2	0.7	36.2	36.7	35.8
Hungary	2011	747	25.6	58.6	13.6	2.2	25.6	25.1	26.1
	2015	722	30.1	49.5	15.6	4.8	30.1	30.7	29.6
Iran, Islamic Rep. of	2011	818	27.5	45.8	20.2	6.5	27.5	29.9	25.0
	2015	546	3.9	60.4	25.1	10.6	3.9	3.7	4.0
Ireland	2011	649	27.8	58.1	12.4	1.6	27.8	34.7	20.8
	2015	615	30.0	64.4	4.2	1.4	30.0	30.5	29.5
Italy	2011	592	23.9	51.7	20.6	3.7	23.9	24.3	23.6
	2015	619	21.8	53.0	21.5	3.7	21.8	19.0	24.5
Japan	2011	625	36.5	54.4	6.4	2.7	36.5	36.5	36.4
	2015	618	48.7	42.7	6.9	1.8	48.7	50.0	47.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_12 (S051175): Earth Science / Applying Type: CR 1 Point
Label: X marks a town on Earth

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	622	38.2	35.1	19.7	7.1	38.2	36.7	39.7
	2015	670	44.3	41.4	13.2	1.1	44.3	46.6	42.2
Korea, Rep. of	2011	617	34.0	63.1	2.7	0.2	34.0	39.7	28.0
	2015	668	47.0	50.3	2.4	0.3	47.0	47.5	46.6
Kuwait	2011	590	7.4	46.4	36.7	9.5	7.4	8.7	5.7
	2015	511	9.1	37.6	39.6	13.7	9.1	11.3	6.8
Lithuania	2011	659	26.3	57.1	11.9	4.6	26.3	28.6	24.4
	2015	640	32.9	53.7	11.9	1.5	32.9	33.2	32.5
Morocco	2011	1130	3.0	34.1	51.6	11.4	3.0	3.9	2.2
	2015	716	5.2	54.9	30.9	8.9	5.2	5.3	5.2
Netherlands	2011	468	25.8	70.2	2.9	1.0	25.8	25.5	25.9
	2015	640	20.8	68.4	7.1	3.7	20.8	20.6	21.0
New Zealand	2011	790	24.5	65.7	7.4	2.4	24.5	27.4	21.7
	2015	892	14.5	73.9	8.9	2.7	14.5	13.8	15.1
Northern Ireland	2011	500	39.0	45.5	13.5	2.0	39.0	41.4	36.8
	2015	451	27.1	62.2	9.9	0.8	27.1	32.8	20.3
Oman	2011	1482	2.7	58.0	33.4	5.9	2.7	3.7	1.8
	2015	1290	18.7	55.1	21.6	4.5	18.7	18.7	18.8
Portugal	2011	550	28.9	62.4	7.1	1.6	28.9	25.9	31.6
	2015	661	22.8	59.7	9.7	7.8	22.8	22.6	23.0
Qatar	2011	587	14.7	62.8	19.1	3.5	14.7	16.5	13.0
	2015	740	26.4	50.3	17.5	5.7	26.4	31.9	20.3
Russian Federation	2011	648	32.8	53.3	12.6	1.4	32.8	34.1	31.5
	2015	707	35.0	52.7	10.6	1.7	35.0	34.7	35.2
Saudi Arabia	2011	676	38.7	39.7	17.7	3.9	38.7	43.9	33.2
	2015	617	29.3	33.8	27.2	9.6	29.3	39.5	20.2
Serbia	2011	628	15.6	52.0	28.3	4.0	15.6	15.6	15.6
	2015	573	15.1	49.9	26.2	8.8	15.1	15.3	14.9
Singapore	2011	906	35.2	60.6	3.7	0.5	35.2	36.7	33.7
	2015	930	42.6	54.7	2.4	0.2	42.6	42.5	42.8
Slovak Republic	2011	796	26.1	59.9	12.2	1.8	26.1	23.9	28.1
	2015	820	25.1	60.0	11.8	3.2	25.1	28.1	22.1
Slovenia	2011	645	28.5	48.6	17.9	5.0	28.5	28.5	28.4
	2015	633	47.8	33.3	14.1	4.8	47.8	47.5	48.2
Spain	2011	594	22.8	53.6	19.5	4.1	22.8	25.4	20.2
	2015	1120	20.2	61.5	13.8	4.5	20.2	21.0	19.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S11_12 (S051175): Earth Science / Applying Type: CR 1 Point
Label: X marks a town on Earth

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	624	28.8	55.0	14.3	1.9	28.8	34.4	24.3
	2015	594	19.5	66.5	8.2	5.8	19.5	21.5	17.8
Turkey	2011	1080	26.6	60.1	12.0	1.2	26.6	26.2	27.0
	2015	933	27.7	61.5	8.9	1.8	27.7	28.2	27.2
United Arab Emirates	2011	2080	12.8	55.4	23.6	8.2	12.8	15.2	10.3
	2015	3005	14.6	59.9	22.0	3.5	14.6	16.7	12.8
United States	2011	1789	31.4	62.6	2.9	3.1	31.4	32.8	30.0
	2015	1430	36.2	54.4	4.1	5.3	36.2	37.6	34.8

International Avg (n=40)	2011	30291	25.9	54.4	16.1	3.6	25.9	27.4	24.5
	2015	30656	25.8	55.7	14.3	4.2	25.8	27.2	24.4

Ontario, Canada	2011	649	29.8	58.4	7.9	3.8	29.8	26.5	33.3
	2015	658	23.2	63.0	7.7	6.1	23.2	21.5	24.8
Quebec, Canada	2011	617	30.1	59.7	8.5	1.7	30.1	29.4	30.9
	2015	404	30.8	56.3	10.2	2.6	30.8	33.7	27.6
Norway (4)	2011	445	35.4	45.5	13.8	5.4	35.4	39.2	32.1
	2015	590	22.8	56.3	12.9	7.9	22.8	25.9	19.3
Abu Dhabi, UAE	2011	591	11.4	59.1	21.2	8.3	11.4	13.9	9.0
	2015	708	9.0	60.8	25.1	5.2	9.0	11.1	7.1
Dubai, UAE	2011	867	17.8	55.8	19.3	7.1	17.8	20.0	15.9
	2015	1051	27.4	60.2	10.8	1.6	27.4	30.5	24.6
Florida, US	2011	375	36.1	59.5	2.5	1.9	36.1	39.9	32.1
	2015	289	42.6	48.8	5.2	3.4	42.6	49.2	36.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_01 (S051054): Life Science / Knowing Type: MC Key: A
Label: New kind of mammal discovered

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	74.2	74.2	6.6	9.6	8.0	1.4	0.1	76.8	71.8
	2015	869	80.7	80.7	3.8	10.2	3.6	1.4	0.3	81.6	79.9
Bahrain	2011	587	53.6	53.6	8.7	20.6	15.0	2.0	0.0	53.7	53.5
	2015	589	47.4	47.4	10.2	26.3	14.1	1.2	0.7	44.2	50.8
Belgium (Flemish)	2011	690	84.4	84.4	6.6	5.1	3.0	0.9	0.0	84.0	84.9
	2015	776	75.7	75.7	7.5	9.8	4.6	1.8	0.5	75.9	75.5
Chile	2011	800	81.6	81.6	4.1	9.0	3.9	0.5	0.9	78.8	84.7
	2015	684	81.9	81.9	4.5	10.0	1.3	1.5	0.7	82.3	81.6
Chinese Taipei	2011	605	55.1	55.1	5.6	35.4	3.6	0.3	0.0	50.6	59.1
	2015	611	50.2	50.2	7.0	35.4	6.4	1.0	0.0	49.3	51.1
Croatia	2011	664	87.5	87.5	5.8	4.8	0.9	0.9	0.0	86.8	88.2
	2015	575	86.9	86.9	4.8	6.2	0.9	1.0	0.1	84.0	89.6
Czech Republic	2011	659	86.2	86.2	5.2	6.8	0.6	1.2	0.0	87.7	84.8
	2015	739	87.4	87.4	3.1	7.3	0.5	1.1	0.5	90.6	84.9
Denmark	2011	573	73.8	73.8	12.9	4.9	6.9	1.4	0.0	78.8	68.4
	2015	525	76.3	76.3	11.4	6.1	3.6	1.9	0.7	75.6	77.0
England	2011	472	74.1	74.1	6.6	10.4	8.2	0.2	0.5	71.8	76.2
	2015	564	77.1	77.1	7.4	11.6	3.1	0.8	0.0	74.8	79.3
Finland	2011	660	90.9	90.9	4.7	2.3	1.4	0.5	0.1	91.4	90.5
	2015	718	89.3	89.3	4.3	3.3	2.1	1.0	0.0	91.7	87.0
Georgia	2011	668	62.6	62.6	7.8	21.3	6.7	1.3	0.3	59.8	65.5
	2015	568	60.4	60.4	5.8	25.3	5.8	1.9	0.8	59.5	61.2
Germany	2011	567	86.6	86.6	4.2	5.6	2.1	1.4	0.0	85.9	87.3
	2015	571	89.0	89.0	3.6	4.8	1.3	1.0	0.3	91.0	87.2
Hong Kong SAR	2011	566	72.2	72.2	8.0	15.7	3.6	0.5	0.0	72.7	71.8
	2015	531	74.5	74.5	5.6	14.9	3.7	1.3	0.0	72.0	76.4
Hungary	2011	737	78.9	78.9	6.5	9.8	4.3	0.2	0.3	80.4	77.6
	2015	720	84.1	84.1	5.1	7.2	2.1	0.9	0.7	82.3	85.6
Iran, Islamic Rep. of	2011	815	41.4	41.4	10.3	30.0	16.3	1.6	0.4	36.5	46.2
	2015	548	41.7	41.7	9.7	25.4	19.4	3.6	0.3	41.3	42.0
Ireland	2011	654	75.3	75.3	5.6	11.4	6.5	1.3	0.0	77.3	73.2
	2015	614	79.0	79.0	6.8	8.8	4.8	0.4	0.1	79.0	79.0
Italy	2011	604	88.2	88.2	2.1	5.8	3.3	0.6	0.0	90.8	85.5
	2015	621	87.6	87.6	3.4	5.8	2.3	0.8	0.1	88.6	86.8
Japan	2011	629	81.2	81.2	5.3	10.6	2.3	0.5	0.2	80.2	82.1
	2015	629	79.0	79.0	4.2	13.9	2.0	0.7	0.3	78.0	80.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_01 (S051054): Life Science / Knowing Type: MC Key: A
Label: New kind of mammal discovered

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	54.2	54.2	5.5	23.2	15.8	1.0	0.2	52.9	55.5
	2015	671	62.1	62.1	7.9	19.6	10.2	0.2	0.0	64.4	60.0
Korea, Rep. of	2011	619	84.4	84.4	4.6	9.1	1.4	0.4	0.0	86.9	82.0
	2015	661	89.2	89.2	3.9	4.8	1.5	0.7	0.0	87.1	90.9
Kuwait	2011	575	32.6	32.6	16.7	26.3	17.0	6.9	0.5	33.7	31.3
	2015	518	36.2	36.2	16.3	26.2	12.6	7.4	1.4	36.1	36.9
Lithuania	2011	667	83.6	83.6	5.3	8.3	1.7	0.5	0.6	88.3	79.4
	2015	638	85.3	85.3	6.2	6.0	0.9	1.5	0.0	89.8	80.6
Morocco	2011	1033	35.5	35.5	23.1	28.0	11.9	1.4	0.0	43.1	28.4
	2015	724	42.8	42.8	19.5	24.1	12.6	0.8	0.2	40.6	45.1
Netherlands	2011	458	83.9	83.9	9.0	5.4	1.3	0.4	0.0	85.9	81.6
	2015	632	83.2	83.2	7.6	4.4	2.9	1.7	0.2	84.1	82.3
New Zealand	2011	795	66.8	66.8	7.2	16.2	8.7	1.0	0.1	67.6	66.0
	2015	902	76.8	76.8	6.4	8.4	7.0	1.3	0.0	79.3	74.3
Northern Ireland	2011	516	74.1	74.1	7.9	12.5	5.4	0.2	0.0	77.6	70.2
	2015	439	74.8	74.8	8.2	10.6	6.5	0.0	0.0	75.4	74.0
Oman	2011	1488	36.7	36.7	17.5	25.5	17.5	2.3	0.4	35.6	37.8
	2015	1293	43.4	43.4	14.4	24.6	15.4	1.9	0.4	43.8	43.0
Portugal	2011	579	78.9	78.9	2.2	10.8	5.1	2.6	0.5	78.8	79.0
	2015	674	78.3	78.3	3.2	12.2	4.7	1.6	0.1	78.8	77.8
Qatar	2011	595	43.8	43.8	15.6	28.2	11.2	0.9	0.3	46.6	41.5
	2015	740	53.9	53.9	10.0	18.8	15.0	2.2	0.1	52.5	55.3
Russian Federation	2011	632	89.5	89.5	3.3	3.8	2.8	0.6	0.0	92.7	86.5
	2015	693	88.2	88.2	3.6	5.0	2.7	0.4	0.0	89.3	87.2
Saudi Arabia	2011	662	50.7	50.7	9.9	24.7	13.5	1.2	0.0	52.5	48.8
	2015	595	46.3	46.3	13.8	24.8	12.0	2.5	0.6	44.9	47.8
Serbia	2011	629	85.7	85.7	6.7	6.0	0.5	1.1	0.0	82.4	88.8
	2015	576	85.4	85.4	5.0	5.7	1.4	1.4	1.1	85.8	85.0
Singapore	2011	906	81.9	81.9	3.0	9.7	4.9	0.4	0.0	83.5	80.3
	2015	927	79.0	79.0	5.3	10.7	4.5	0.4	0.0	78.3	79.8
Slovak Republic	2011	813	87.1	87.1	3.4	6.5	1.4	1.6	0.0	86.6	87.7
	2015	835	82.5	82.5	4.2	10.2	2.0	0.6	0.4	84.8	80.3
Slovenia	2011	647	87.9	87.9	3.1	6.6	1.5	0.9	0.0	89.3	86.8
	2015	627	89.5	89.5	2.5	4.6	1.8	1.4	0.1	92.6	86.4
Spain	2011	580	80.7	80.7	4.6	10.1	4.1	0.5	0.0	76.5	84.2
	2015	1105	87.6	87.6	3.0	6.5	1.1	1.2	0.6	87.5	87.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_01 (S051054): Life Science / Knowing Type: MC Key: A
Label: New kind of mammal discovered

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	86.4	86.4	6.8	3.1	1.3	1.8	0.6	86.0	86.7
	2015	594	86.4	86.4	8.0	1.0	1.6	2.7	0.3	85.8	87.0
Turkey	2011	1077	56.8	56.8	7.4	23.3	11.2	1.0	0.3	53.6	59.4
	2015	909	57.9	57.9	7.7	23.4	10.4	0.5	0.2	55.9	59.9
United Arab Emirates	2011	2080	45.8	45.8	9.7	27.5	15.2	1.3	0.5	47.2	44.3
	2015	3029	51.5	51.5	10.3	24.0	11.9	2.3	0.1	50.1	52.7
United States	2011	1813	79.3	79.3	5.9	9.2	5.0	0.5	0.0	77.2	81.6
	2015	1435	79.3	79.3	4.3	8.4	5.3	2.2	0.5	78.1	80.4

International Avg (n=40)	2011	30267	71.4	71.4	7.4	13.6	6.4	1.1	0.2	71.7	71.0
	2015	30669	72.7	72.7	7.0	12.9	5.6	1.5	0.3	72.7	72.7

Ontario, Canada	2011	639	77.0	77.0	4.0	11.1	6.1	1.6	0.3	76.2	77.7
	2015	639	77.6	77.6	4.7	10.8	4.6	0.9	1.4	79.3	76.1
Quebec, Canada	2011	600	83.5	83.5	4.4	7.2	4.4	0.5	0.0	85.2	81.6
	2015	400	81.5	81.5	5.8	9.2	2.4	1.0	0.1	78.7	84.1
Norway (4)	2011	450	81.7	81.7	5.7	9.6	2.2	0.6	0.2	82.8	80.5
	2015	608	81.9	81.9	8.5	5.1	2.5	1.8	0.2	81.6	82.2
Abu Dhabi, UAE	2011	582	41.5	41.5	9.9	29.9	17.0	0.9	0.8	42.0	40.9
	2015	721	43.8	43.8	14.0	24.3	14.8	2.8	0.3	39.3	47.9
Dubai, UAE	2011	881	55.4	55.4	6.4	24.7	11.2	1.9	0.4	57.7	53.5
	2015	1063	68.0	68.0	6.8	18.5	6.0	0.7	0.0	66.6	69.3
Florida, US	2011	366	80.6	80.6	4.5	9.0	5.2	0.7	0.0	76.2	85.1
	2015	299	79.3	79.3	6.7	8.4	4.6	1.1	0.0	79.2	79.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

SL3_02 (S051024): Life Science / Applying Type: CR 1 Point
Label: Cover your mouth though not sick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	51.6	46.3	2.0	0.1	51.6	60.7	43.0
	2015	869	47.4	51.1	1.2	0.3	47.4	58.9	37.9
Bahrain	2011	587	35.0	63.4	1.6	0.0	35.0	38.7	31.3
	2015	589	24.7	72.0	2.7	0.7	24.7	27.5	21.7
Belgium (Flemish)	2011	690	40.4	59.0	0.6	0.0	40.4	41.4	39.4
	2015	776	35.4	63.0	0.8	0.8	35.4	40.4	30.6
Chile	2011	800	40.3	57.3	1.4	1.1	40.3	44.0	36.2
	2015	684	44.0	52.8	2.0	1.3	44.0	52.9	35.5
Chinese Taipei	2011	605	31.9	67.9	0.2	0.0	31.9	31.8	32.1
	2015	611	36.9	62.8	0.3	0.0	36.9	39.8	33.9
Croatia	2011	664	23.3	76.6	0.1	0.0	23.3	26.5	19.8
	2015	575	32.1	67.1	0.7	0.1	32.1	35.6	28.9
Czech Republic	2011	659	32.1	65.5	2.3	0.0	32.1	34.2	30.1
	2015	739	30.7	68.1	0.7	0.5	30.7	34.5	27.7
Denmark	2011	573	51.2	48.3	0.4	0.0	51.2	60.0	41.7
	2015	525	50.8	45.9	2.1	1.1	50.8	59.6	41.9
England	2011	472	64.6	33.7	1.2	0.5	64.6	67.3	62.1
	2015	564	54.1	45.5	0.4	0.0	54.1	62.3	45.7
Finland	2011	660	49.8	49.3	0.8	0.1	49.8	53.1	46.3
	2015	718	48.9	50.8	0.2	0.1	48.9	53.1	44.8
Georgia	2011	668	19.1	79.2	1.3	0.3	19.1	21.5	16.7
	2015	568	17.4	75.3	6.4	0.9	17.4	18.7	16.2
Germany	2011	567	37.7	60.0	2.3	0.0	37.7	39.8	35.7
	2015	571	46.6	52.2	0.9	0.3	46.6	50.9	43.0
Hong Kong SAR	2011	566	38.9	61.0	0.1	0.0	38.9	42.0	36.3
	2015	531	37.8	60.9	0.5	0.8	37.8	40.6	35.6
Hungary	2011	737	39.3	59.9	0.6	0.3	39.3	41.0	37.6
	2015	720	46.3	52.6	0.4	0.7	46.3	49.8	43.1
Iran, Islamic Rep. of	2011	815	20.4	77.2	1.9	0.4	20.4	25.5	15.3
	2015	548	10.0	87.6	1.8	0.6	10.0	12.3	7.9
Ireland	2011	654	52.9	45.8	1.3	0.0	52.9	62.1	43.2
	2015	614	53.3	45.7	0.9	0.1	53.3	59.0	47.5
Italy	2011	604	34.9	64.4	0.7	0.0	34.9	35.9	33.9
	2015	620	26.2	71.3	2.4	0.1	26.2	28.8	23.6
Japan	2011	629	50.8	48.7	0.3	0.2	50.8	53.3	48.3
	2015	629	53.9	45.3	0.6	0.3	53.9	54.1	53.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_02 (S051024): Life Science / Applying Type: CR 1 Point
Label: Cover your mouth though not sick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	38.3	50.7	10.7	0.2	38.3	42.2	34.3
	2015	671	51.7	47.7	0.6	0.0	51.7	53.5	50.1
Korea, Rep. of	2011	619	25.7	73.5	0.8	0.0	25.7	26.7	24.7
	2015	661	23.9	75.4	0.7	0.0	23.9	22.6	25.1
Kuwait	2011	583	13.2	80.6	5.3	0.9	13.2	18.2	7.8
	2015	518	11.8	82.2	4.3	1.7	11.8	11.5	12.4
Lithuania	2011	667	30.3	68.2	0.9	0.6	30.3	41.8	20.1
	2015	638	37.8	61.7	0.5	0.0	37.8	49.4	25.6
Morocco	2011	1108	1.0	92.7	5.9	0.4	1.0	1.1	1.0
	2015	729	3.6	91.2	4.5	0.8	3.6	3.2	3.9
Netherlands	2011	458	41.8	57.2	1.1	0.0	41.8	43.5	39.9
	2015	632	31.2	66.9	1.8	0.2	31.2	36.3	26.0
New Zealand	2011	795	46.2	51.9	1.8	0.1	46.2	52.1	40.7
	2015	902	43.5	55.4	1.1	0.0	43.5	47.7	39.1
Northern Ireland	2011	516	51.7	47.5	0.8	0.0	51.7	60.2	42.3
	2015	440	54.1	45.3	0.0	0.6	54.1	64.0	42.5
Oman	2011	1488	10.1	87.3	2.0	0.5	10.1	12.1	8.1
	2015	1294	18.4	78.3	2.8	0.5	18.4	22.5	14.4
Portugal	2011	579	32.0	65.1	2.3	0.5	32.0	37.6	27.0
	2015	674	35.7	62.8	1.0	0.4	35.7	44.5	27.7
Qatar	2011	594	22.8	76.5	0.4	0.3	22.8	29.7	17.0
	2015	740	31.0	66.3	2.2	0.4	31.0	35.2	27.0
Russian Federation	2011	632	42.3	56.6	1.1	0.0	42.3	48.7	36.3
	2015	693	43.2	56.5	0.1	0.2	43.2	49.3	37.1
Saudi Arabia	2011	663	22.4	76.2	1.4	0.0	22.4	24.8	19.7
	2015	599	16.5	78.0	4.7	0.8	16.5	26.6	5.1
Serbia	2011	629	31.8	66.9	1.4	0.0	31.8	30.6	32.9
	2015	576	30.3	67.5	1.1	1.1	30.3	35.3	25.5
Singapore	2011	906	68.3	31.2	0.6	0.0	68.3	71.2	65.1
	2015	927	66.2	33.5	0.1	0.1	66.2	66.5	65.9
Slovak Republic	2011	813	31.6	67.4	1.0	0.0	31.6	31.8	31.4
	2015	835	26.1	73.0	0.5	0.4	26.1	28.7	23.4
Slovenia	2011	649	51.3	48.0	0.7	0.0	51.3	54.2	49.1
	2015	627	52.3	46.3	1.0	0.3	52.3	50.6	54.1
Spain	2011	580	35.0	63.5	1.4	0.0	35.0	39.5	31.2
	2015	1105	30.1	68.1	1.2	0.7	30.1	33.2	27.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SI3_02 (S051024): Life Science / Applying Type: CR 1 Point
Label: Cover your mouth though not sick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	49.9	48.8	0.7	0.6	49.9	55.6	45.1
	2015	594	44.8	54.6	0.3	0.3	44.8	54.7	34.3
Turkey	2011	1077	27.9	70.4	1.3	0.4	27.9	30.7	25.6
	2015	909	31.2	67.9	0.4	0.5	31.2	36.5	25.7
United Arab Emirates	2011	2080	23.4	74.3	1.7	0.5	23.4	27.8	19.0
	2015	3029	27.7	70.7	1.4	0.2	27.7	31.5	24.1
United States	2011	1813	52.7	46.2	1.1	0.0	52.7	56.5	48.4
	2015	1435	51.2	46.3	1.9	0.6	51.2	53.0	49.7

International Avg (n=40)	2011	30352	36.6	61.6	1.6	0.2	36.6	40.4	32.9
	2015	30679	36.5	61.6	1.4	0.5	36.5	40.9	32.1

Ontario, Canada	2011	639	51.6	47.0	1.2	0.3	51.6	51.9	51.3
	2015	640	53.7	43.6	1.2	1.6	53.7	58.4	49.4
Quebec, Canada	2011	600	60.7	38.1	1.1	0.0	60.7	65.1	56.1
	2015	400	52.5	45.4	2.0	0.1	52.5	62.6	42.8
Norway (4)	2011	450	34.7	63.6	1.5	0.2	34.7	37.8	31.5
	2015	608	40.0	58.5	0.9	0.6	40.0	44.6	36.1
Abu Dhabi, UAE	2011	582	21.7	75.8	1.6	0.9	21.7	28.4	15.3
	2015	721	22.3	76.0	1.5	0.3	22.3	24.7	20.2
Dubai, UAE	2011	881	33.1	65.3	1.1	0.4	33.1	35.5	31.1
	2015	1063	42.9	56.2	0.8	0.0	42.9	47.4	38.7
Florida, US	2011	366	57.0	41.2	1.8	0.0	57.0	62.0	51.9
	2015	299	53.2	45.5	1.3	0.0	53.2	59.5	48.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_03A (S051132A): Life Science / Reasoning Type: CR 1 Point
Label: Hamad's Garden: Which survive

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	29.0	45.8	25.1	0.1	29.0	31.5	26.6
	2015	869	31.5	47.0	20.9	0.6	31.5	37.1	26.9
Bahrain	2011	587	9.4	39.0	51.5	0.0	9.4	12.3	6.5
	2015	589	16.9	41.5	40.7	0.9	16.9	20.5	13.2
Belgium (Flemish)	2011	690	19.2	55.6	25.2	0.0	19.2	19.7	18.6
	2015	776	13.8	53.0	32.5	0.8	13.8	14.9	12.7
Chile	2011	800	11.1	63.1	24.7	1.1	11.1	12.5	9.5
	2015	684	6.5	70.7	21.1	1.6	6.5	8.8	4.4
Chinese Taipei	2011	605	19.0	64.3	16.7	0.0	19.0	20.0	18.1
	2015	611	16.6	68.5	14.9	0.0	16.6	16.6	16.6
Croatia	2011	664	19.5	53.4	27.2	0.0	19.5	21.7	17.1
	2015	575	25.2	56.7	17.9	0.1	25.2	26.4	24.1
Czech Republic	2011	659	27.9	38.1	33.9	0.0	27.9	28.2	27.7
	2015	739	28.7	38.0	32.8	0.5	28.7	28.1	29.2
Denmark	2011	573	26.4	51.5	22.0	0.1	26.4	32.7	19.6
	2015	525	40.2	45.3	13.2	1.3	40.2	42.1	38.2
England	2011	472	26.5	46.0	27.0	0.5	26.5	28.9	24.4
	2015	564	31.4	41.6	27.1	0.0	31.4	35.6	27.0
Finland	2011	660	33.0	42.0	24.9	0.1	33.0	33.5	32.5
	2015	718	24.8	44.4	30.8	0.1	24.8	27.0	22.6
Georgia	2011	671	8.1	18.3	73.3	0.3	8.1	10.3	5.8
	2015	568	3.7	36.4	58.8	1.1	3.7	4.5	2.9
Germany	2011	567	18.0	49.4	32.7	0.0	18.0	20.3	15.8
	2015	571	15.2	52.1	32.3	0.3	15.2	16.7	14.1
Hong Kong SAR	2011	566	21.3	62.8	15.9	0.0	21.3	22.6	20.2
	2015	531	31.6	53.7	14.0	0.8	31.6	36.0	28.2
Hungary	2011	737	24.3	48.5	26.9	0.3	24.3	30.7	18.3
	2015	720	28.1	43.4	27.8	0.7	28.1	32.4	24.3
Iran, Islamic Rep. of	2011	815	16.6	34.4	48.5	0.4	16.6	16.9	16.4
	2015	548	13.2	27.9	58.3	0.6	13.2	17.9	8.7
Ireland	2011	654	33.3	37.8	28.9	0.0	33.3	38.4	28.0
	2015	614	25.9	46.2	27.8	0.1	25.9	34.1	17.7
Italy	2011	603	19.6	43.0	37.4	0.0	19.6	20.2	18.9
	2015	621	10.3	41.1	48.3	0.3	10.3	10.9	9.8
Japan	2011	629	21.3	66.7	11.7	0.2	21.3	22.1	20.6
	2015	629	17.5	64.7	17.6	0.3	17.5	18.5	16.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_03A (S051132A): Life Science / Reasoning Type: CR 1 Point
Label: Hamad's Garden: Which survive

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	19.6	28.4	51.7	0.2	19.6	20.8	18.5
	2015	671	18.4	37.7	43.8	0.1	18.4	22.1	15.0
Korea, Rep. of	2011	619	50.8	44.3	5.0	0.0	50.8	52.8	48.8
	2015	661	56.6	37.7	5.8	0.0	56.6	64.7	49.6
Kuwait	2011	583	2.5	33.2	63.3	1.0	2.5	3.8	1.0
	2015	518	2.7	23.9	71.6	1.8	2.7	3.0	2.6
Lithuania	2011	667	19.8	47.8	31.9	0.6	19.8	23.9	16.1
	2015	638	22.4	49.9	27.5	0.1	22.4	25.3	19.4
Morocco	2011	1113	1.0	17.3	81.0	0.7	1.0	1.5	0.5
	2015	732	3.5	23.9	71.2	1.4	3.5	2.4	4.8
Netherlands	2011	458	14.0	71.4	14.4	0.2	14.0	16.4	10.8
	2015	632	14.5	67.1	18.2	0.2	14.5	15.2	13.9
New Zealand	2011	795	20.7	49.3	29.8	0.1	20.7	24.0	17.7
	2015	902	27.4	36.9	35.8	0.0	27.4	33.1	21.4
Northern Ireland	2011	516	31.8	48.4	19.7	0.0	31.8	38.8	24.0
	2015	440	29.1	49.6	20.7	0.6	29.1	35.9	21.7
Oman	2011	1488	2.5	43.1	53.8	0.5	2.5	2.9	2.1
	2015	1293	5.9	48.4	45.0	0.6	5.9	8.2	3.7
Portugal	2011	579	27.1	50.3	22.1	0.5	27.1	34.3	20.8
	2015	674	29.0	50.1	20.5	0.4	29.0	34.2	24.2
Qatar	2011	595	8.4	44.8	46.5	0.3	8.4	11.4	5.8
	2015	740	9.6	45.0	44.7	0.7	9.6	9.9	9.2
Russian Federation	2011	632	29.6	36.5	33.9	0.0	29.6	34.0	25.5
	2015	693	29.2	47.5	22.9	0.3	29.2	30.8	27.7
Saudi Arabia	2011	663	4.7	32.2	63.1	0.0	4.7	6.3	2.9
	2015	600	4.7	21.7	72.7	0.9	4.7	7.8	1.3
Serbia	2011	631	20.4	55.6	24.0	0.0	20.4	21.8	19.1
	2015	576	22.0	48.6	28.3	1.1	22.0	26.0	18.2
Singapore	2011	906	39.8	56.2	4.0	0.0	39.8	44.0	35.4
	2015	927	44.3	50.7	4.9	0.1	44.3	47.4	41.4
Slovak Republic	2011	813	17.8	47.3	34.8	0.0	17.8	18.6	17.0
	2015	835	17.2	41.0	41.3	0.5	17.2	18.7	15.6
Slovenia	2011	649	19.0	46.1	34.8	0.1	19.0	22.0	16.6
	2015	627	22.2	47.7	29.4	0.7	22.2	23.7	20.6
Spain	2011	580	13.2	65.7	21.1	0.0	13.2	15.4	11.3
	2015	1105	30.3	51.4	17.6	0.7	30.3	31.6	29.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SI3_03A (S051132A): Life Science / Reasoning Type: CR 1 Point
Label: Hamad's Garden: Which survive

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	34.2	42.0	23.2	0.6	34.2	36.3	32.4
	2015	594	21.7	55.3	22.7	0.3	21.7	26.4	16.6
Turkey	2011	1077	18.1	46.1	35.4	0.4	18.1	19.3	17.1
	2015	909	15.9	46.7	36.9	0.5	15.9	16.9	14.8
United Arab Emirates	2011	2080	11.2	39.5	48.7	0.6	11.2	14.3	8.0
	2015	3029	12.2	40.3	47.2	0.2	12.2	13.1	11.4
United States	2011	1813	32.3	53.6	14.1	0.0	32.3	35.5	28.8
	2015	1435	33.9	51.8	13.5	0.8	33.9	34.6	33.3

International Avg (n=40)	2011	30362	20.6	46.5	32.7	0.2	20.6	23.0	18.1
	2015	30683	21.3	46.1	32.0	0.6	21.3	24.0	18.8

Ontario, Canada	2011	639	31.0	54.0	14.7	0.3	31.0	30.0	31.9
	2015	640	26.3	54.8	17.2	1.7	26.3	31.7	21.7
Quebec, Canada	2011	600	10.3	65.3	24.3	0.0	10.3	11.7	8.9
	2015	400	10.7	54.1	35.0	0.1	10.7	12.1	9.4
Norway (4)	2011	450	6.7	41.4	51.6	0.2	6.7	8.6	4.9
	2015	608	5.1	46.2	48.0	0.6	5.1	5.4	4.8
Abu Dhabi, UAE	2011	582	11.0	36.9	51.2	0.9	11.0	13.6	8.4
	2015	721	9.6	37.8	52.4	0.3	9.6	9.5	9.7
Dubai, UAE	2011	881	15.2	47.5	36.9	0.5	15.2	19.8	11.1
	2015	1063	20.6	49.7	29.7	0.0	20.6	22.2	19.2
Florida, US	2011	366	34.2	47.1	18.7	0.0	34.2	34.4	33.9
	2015	299	33.0	51.8	14.7	0.4	33.0	39.7	27.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_03B (S051132B): Life Science / Applying Type: CR 1 Point
Label: Hamad's Garden: Plant structure

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	7.9	11.4	78.0	2.4	0.2	19.3	20.7	18.0
	2015	869	6.0	16.0	75.6	1.1	1.3	22.1	23.8	20.7
Bahrain	2011	587	12.5	14.6	71.3	1.2	0.4	27.0	30.0	24.1
	2015	589	14.3	13.7	68.3	2.7	1.0	28.0	31.9	24.0
Belgium (Flemish)	2011	690	5.4	5.5	88.6	0.4	0.1	10.9	9.4	12.5
	2015	776	5.8	7.9	84.1	1.3	0.9	13.6	14.3	13.0
Chile	2011	800	7.2	12.3	76.3	2.8	1.4	19.5	16.3	23.1
	2015	684	13.8	25.6	55.4	2.5	2.6	39.4	43.3	35.8
Chinese Taipei	2011	605	10.6	11.5	77.8	0.0	0.0	22.2	20.9	23.3
	2015	611	11.5	38.2	50.0	0.4	0.0	49.6	46.3	53.1
Croatia	2011	664	7.3	14.6	77.5	0.5	0.0	21.9	22.9	20.9
	2015	575	7.8	15.9	75.2	0.8	0.3	23.7	24.6	22.8
Czech Republic	2011	659	22.9	5.4	66.5	5.1	0.0	28.3	29.0	27.7
	2015	739	20.6	9.4	67.2	2.1	0.7	30.0	24.5	34.5
Denmark	2011	573	14.4	9.7	73.8	1.9	0.1	24.2	24.4	23.8
	2015	525	15.3	18.1	61.7	2.4	2.5	33.4	38.4	28.3
England	2011	472	9.4	12.3	77.0	0.9	0.5	21.7	22.9	20.6
	2015	564	19.5	9.4	69.4	1.4	0.2	28.9	29.2	28.7
Finland	2011	660	11.5	14.9	73.3	0.2	0.1	26.4	22.7	30.2
	2015	718	11.1	17.5	70.8	0.3	0.3	28.6	28.5	28.6
Georgia	2011	671	17.2	10.4	68.8	2.9	0.7	27.7	30.4	24.9
	2015	568	17.5	4.8	70.3	5.4	2.1	22.3	20.5	23.8
Germany	2011	567	11.7	11.2	75.2	1.9	0.0	22.9	21.4	24.4
	2015	571	14.6	19.8	63.7	1.0	0.9	34.4	32.7	35.6
Hong Kong SAR	2011	566	7.7	13.0	78.0	1.3	0.0	20.7	19.0	22.1
	2015	531	12.2	16.3	70.6	0.1	0.8	28.5	25.6	30.7
Hungary	2011	737	7.1	16.7	75.1	0.4	0.6	23.8	20.0	27.4
	2015	720	8.0	24.0	65.7	0.5	1.8	32.0	27.9	35.7
Iran, Islamic Rep. of	2011	815	2.9	11.6	83.6	1.2	0.7	14.5	14.1	14.8
	2015	548	2.5	9.7	83.3	3.6	1.0	12.2	13.5	10.9
Ireland	2011	654	5.3	10.8	81.9	1.8	0.2	16.1	14.7	17.6
	2015	614	10.7	9.7	77.9	1.2	0.5	20.4	18.5	22.3
Italy	2011	604	17.0	16.3	66.3	0.4	0.0	33.3	31.7	34.9
	2015	619	13.7	14.2	67.1	4.2	0.7	28.0	25.6	30.4
Japan	2011	629	6.7	12.1	79.3	1.7	0.2	18.8	19.3	18.2
	2015	629	10.2	26.2	61.8	1.3	0.6	36.4	34.0	39.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_03B (S051132B): Life Science / Applying Type: CR 1 Point
Label: Hamad's Garden: Plant structure

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	28.5	17.2	41.4	12.6	0.3	45.6	46.0	45.2
	2015	671	61.1	0.0	37.3	1.3	0.3	61.1	63.6	58.8
Korea, Rep. of	2011	619	58.8	17.9	22.6	0.4	0.2	76.8	75.6	78.0
	2015	661	51.5	20.5	27.1	0.9	0.0	72.0	70.5	73.3
Kuwait	2011	583	1.2	0.7	93.4	3.6	1.2	1.9	2.1	1.6
	2015	518	2.5	2.8	79.9	12.5	2.3	5.2	6.3	4.2
Lithuania	2011	667	12.1	5.8	80.2	1.3	0.6	17.9	17.9	18.0
	2015	638	12.0	13.3	74.0	0.5	0.2	25.3	29.2	21.3
Morocco	2011	1113	0.3	0.2	92.7	5.5	1.3	0.5	0.9	0.1
	2015	733	3.9	31.7	58.4	4.1	1.9	35.6	38.9	32.0
Netherlands	2011	458	2.8	7.8	88.7	0.4	0.2	10.6	6.7	14.9
	2015	632	6.2	12.8	78.7	1.1	1.2	19.0	18.7	19.4
New Zealand	2011	795	4.6	12.9	81.5	0.9	0.1	17.5	15.1	19.7
	2015	902	8.3	10.3	79.8	1.5	0.0	18.6	17.5	19.8
Northern Ireland	2011	516	9.5	9.3	80.6	0.6	0.0	18.8	16.3	21.6
	2015	440	7.3	8.8	82.9	0.4	0.6	16.1	15.3	17.2
Oman	2011	1488	7.4	4.8	84.6	2.2	1.0	12.2	13.0	11.5
	2015	1294	12.1	14.0	70.2	2.9	0.9	26.0	30.6	21.7
Portugal	2011	579	7.9	15.8	74.8	1.0	0.5	23.7	25.0	22.5
	2015	674	10.6	13.5	73.7	1.2	1.0	24.1	21.8	26.2
Qatar	2011	595	5.4	7.5	83.4	3.4	0.3	12.9	13.3	12.5
	2015	740	12.9	8.3	74.2	3.5	1.2	21.1	22.9	19.5
Russian Federation	2011	632	20.4	22.1	56.9	0.6	0.0	42.5	47.2	38.1
	2015	693	19.3	29.7	50.1	0.4	0.5	49.0	48.6	49.4
Saudi Arabia	2011	663	7.7	5.7	85.2	1.3	0.2	13.4	17.7	8.7
	2015	600	9.1	4.9	81.3	3.4	1.3	14.0	19.9	7.5
Serbia	2011	631	29.7	8.6	59.2	2.4	0.1	38.2	34.9	41.4
	2015	576	28.9	2.1	64.4	2.5	2.2	31.0	34.2	27.9
Singapore	2011	906	28.7	18.3	52.9	0.1	0.0	47.0	46.8	47.2
	2015	927	21.4	15.5	62.4	0.4	0.3	36.9	34.7	38.9
Slovak Republic	2011	813	13.9	11.5	72.7	1.9	0.0	25.4	25.7	25.1
	2015	835	14.6	9.0	73.2	2.4	0.9	23.6	23.6	23.5
Slovenia	2011	649	20.6	10.4	67.6	1.3	0.2	31.0	28.7	32.9
	2015	627	35.9	13.9	47.5	1.9	0.8	49.7	52.4	47.1
Spain	2011	580	14.8	7.9	75.7	1.6	0.0	22.6	22.9	22.4
	2015	1105	21.3	14.3	62.1	1.4	0.8	35.7	33.3	37.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

S13_03B (S051132B): Life Science / Applying Type: CR 1 Point
Label: Hamad's Garden: Plant structure

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	4.2	8.7	85.5	1.0	0.6	12.9	13.4	12.5
	2015	594	5.9	12.5	78.3	2.8	0.5	18.4	15.0	22.3
Turkey	2011	1077	9.0	3.9	83.3	3.3	0.4	13.0	12.8	13.1
	2015	909	7.3	10.9	80.4	0.8	0.6	18.2	17.3	19.2
United Arab Emirates	2011	2080	11.2	12.5	71.8	3.5	1.0	23.7	24.5	22.9
	2015	3029	13.5	12.4	71.2	2.6	0.4	25.9	26.3	25.5
United States	2011	1813	16.3	23.5	58.5	1.3	0.3	39.9	35.0	45.2
	2015	1435	16.5	25.2	55.7	1.4	1.3	41.6	41.2	42.1

International Avg (n=40)	2011	30363	12.5	11.2	74.0	1.9	0.3	23.7	23.3	24.1
	2015	30683	14.9	14.6	67.5	2.1	0.9	29.5	29.6	29.3

Ontario, Canada	2011	639	10.3	9.6	77.3	2.4	0.4	19.9	17.1	22.3
	2015	640	11.9	14.8	68.0	2.7	2.6	26.7	27.0	26.6
Quebec, Canada	2011	600	4.6	5.8	88.5	1.0	0.0	10.4	10.5	10.3
	2015	400	6.4	10.2	80.6	2.3	0.6	16.6	13.3	19.8
Norway (4)	2011	450	5.4	8.6	85.6	0.2	0.2	14.0	11.3	16.7
	2015	607	8.0	15.3	73.3	2.2	1.2	23.3	19.4	26.6
Abu Dhabi, UAE	2011	582	9.0	12.2	75.6	2.5	0.9	21.1	22.8	19.5
	2015	721	9.8	11.0	76.9	2.1	0.3	20.7	20.1	21.3
Dubai, UAE	2011	881	12.9	13.5	69.4	3.6	0.6	26.3	26.4	26.3
	2015	1063	20.8	15.2	62.1	1.7	0.2	36.0	36.9	35.1
Florida, US	2011	366	18.8	27.6	52.7	0.9	0.0	46.4	46.9	45.8
	2015	299	14.7	28.2	54.9	1.7	0.4	42.9	45.1	41.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_04 (S051040): Life Science / Knowing Type: CR 1 Point
Label: Two things animals need

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	43.6	35.0	19.9	1.3	0.2	43.6	43.4	43.8
	2015	869	34.8	41.7	19.8	2.3	1.4	34.8	35.8	33.9
Bahrain	2011	587	42.8	23.7	27.8	5.4	0.4	42.8	46.4	39.2
	2015	589	44.0	24.5	25.4	4.9	1.1	44.0	48.5	39.5
Belgium (Flemish)	2011	690	31.0	57.0	11.2	0.7	0.1	31.0	29.4	32.7
	2015	776	27.7	58.2	11.9	1.3	0.9	27.7	25.1	30.1
Chile	2011	800	30.3	52.6	11.5	3.8	1.7	30.3	29.1	31.6
	2015	684	36.9	41.5	12.1	6.8	2.7	36.9	37.3	36.4
Chinese Taipei	2011	605	25.0	51.9	18.0	5.1	0.0	25.0	21.7	28.1
	2015	611	36.8	45.6	14.3	3.3	0.0	36.8	36.1	37.6
Croatia	2011	664	52.0	42.1	5.2	0.7	0.0	52.0	56.2	47.5
	2015	575	55.8	32.8	10.2	1.0	0.3	55.8	54.6	56.8
Czech Republic	2011	659	47.0	32.9	16.3	3.4	0.5	47.0	47.8	46.2
	2015	739	44.9	34.5	16.1	3.6	0.9	44.9	45.6	44.4
Denmark	2011	573	39.3	37.0	19.8	3.6	0.3	39.3	40.1	38.4
	2015	525	36.1	43.2	15.9	2.2	2.6	36.1	33.7	38.6
England	2011	472	36.5	48.6	13.1	1.3	0.5	36.5	38.3	34.8
	2015	564	33.1	48.8	16.3	1.2	0.6	33.1	32.7	33.6
Finland	2011	660	34.8	53.7	10.6	0.7	0.1	34.8	33.4	36.3
	2015	718	35.1	52.1	9.8	2.5	0.5	35.1	35.9	34.4
Georgia	2011	670	67.4	15.7	8.6	7.6	0.7	67.4	73.2	61.5
	2015	568	55.1	24.3	11.5	6.9	2.2	55.1	62.2	48.7
Germany	2011	567	29.5	49.7	16.6	3.9	0.2	29.5	33.5	25.7
	2015	571	28.9	49.2	16.8	4.2	0.9	28.9	29.7	28.0
Hong Kong SAR	2011	566	47.9	37.4	12.1	2.5	0.0	47.9	49.5	46.6
	2015	531	45.3	42.2	10.7	1.1	0.8	45.3	46.7	44.2
Hungary	2011	737	41.5	38.3	16.9	2.7	0.6	41.5	47.7	35.7
	2015	720	39.6	44.4	11.0	3.2	1.8	39.6	40.5	38.9
Iran, Islamic Rep. of	2011	815	32.4	16.7	41.5	8.8	0.7	32.4	35.4	29.4
	2015	548	26.2	15.0	46.7	11.1	1.0	26.2	25.3	27.0
Ireland	2011	654	32.3	42.5	23.2	1.9	0.2	32.3	32.5	32.1
	2015	614	36.6	44.9	15.8	2.1	0.5	36.6	35.3	37.9
Italy	2011	604	42.7	38.1	16.9	2.3	0.0	42.7	43.1	42.2
	2015	621	34.8	44.3	16.2	3.7	1.0	34.8	37.0	32.7
Japan	2011	629	36.3	50.0	12.9	0.6	0.2	36.3	33.7	38.9
	2015	629	34.0	57.1	7.4	0.9	0.6	34.0	38.2	29.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_04 (S051040): Life Science / Knowing Type: CR 1 Point
Label: Two things animals need

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	67.9	20.0	7.0	4.6	0.5	67.9	71.1	64.6
	2015	671	75.3	18.5	3.8	2.2	0.3	75.3	80.2	70.8
Korea, Rep. of	2011	619	37.3	53.0	8.4	1.1	0.2	37.3	38.5	36.1
	2015	661	52.6	39.7	7.5	0.2	0.0	52.6	54.6	50.9
Kuwait	2011	580	36.0	22.4	21.1	19.4	1.2	36.0	45.4	25.6
	2015	518	34.8	16.0	22.2	24.6	2.3	34.8	38.6	31.4
Lithuania	2011	667	39.1	47.2	10.9	2.2	0.6	39.1	42.5	36.0
	2015	638	36.3	49.6	12.4	1.4	0.3	36.3	40.1	32.5
Morocco	2011	1112	10.9	10.3	43.1	34.5	1.3	10.9	12.5	9.3
	2015	731	18.0	12.6	51.8	15.7	1.9	18.0	16.7	19.4
Netherlands	2011	458	30.4	55.4	12.9	1.1	0.2	30.4	29.4	31.9
	2015	632	31.9	54.4	11.1	1.3	1.3	31.9	32.3	31.5
New Zealand	2011	795	35.7	33.7	28.6	1.8	0.1	35.7	36.6	34.9
	2015	902	35.0	39.6	21.0	4.3	0.1	35.0	34.7	35.2
Northern Ireland	2011	516	36.9	44.7	15.9	2.5	0.0	36.9	38.9	34.8
	2015	440	35.5	49.8	11.6	2.6	0.6	35.5	34.4	36.3
Oman	2011	1488	24.7	20.6	39.8	13.9	1.1	24.7	27.6	21.7
	2015	1294	35.6	25.5	28.3	9.7	0.9	35.6	39.1	32.3
Portugal	2011	579	46.3	41.3	8.6	3.3	0.5	46.3	45.3	47.2
	2015	674	32.3	57.4	6.5	2.6	1.2	32.3	31.1	33.3
Qatar	2011	595	28.3	15.5	44.7	11.2	0.3	28.3	29.7	27.0
	2015	740	35.6	22.3	30.8	10.0	1.3	35.6	39.3	32.1
Russian Federation	2011	632	54.7	39.5	4.7	1.1	0.0	54.7	57.3	52.3
	2015	693	49.0	43.4	4.4	2.7	0.5	49.0	53.7	44.4
Saudi Arabia	2011	663	40.2	37.5	15.2	7.0	0.2	40.2	48.7	30.9
	2015	600	41.6	20.9	19.1	17.2	1.3	41.6	51.4	30.7
Serbia	2011	631	65.7	25.3	7.0	1.9	0.1	65.7	69.1	62.5
	2015	576	63.0	22.1	8.2	4.3	2.4	63.0	67.2	59.0
Singapore	2011	906	79.6	6.7	13.3	0.4	0.0	79.6	80.0	79.3
	2015	927	81.6	13.1	4.6	0.5	0.3	81.6	82.8	80.5
Slovak Republic	2011	813	45.8	26.6	25.7	1.9	0.0	45.8	43.0	48.8
	2015	835	40.4	31.7	23.0	3.9	1.0	40.4	42.0	38.7
Slovenia	2011	649	62.0	27.4	8.5	1.8	0.3	62.0	63.7	60.7
	2015	627	61.7	30.1	5.5	1.9	0.8	61.7	64.3	59.1
Spain	2011	580	29.8	48.0	19.7	2.4	0.0	29.8	24.1	34.7
	2015	1105	38.3	46.9	10.6	3.3	0.8	38.3	38.1	38.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_04 (S051040): Life Science / Knowing Type: CR 1 Point
Label: Two things animals need

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	51.6	45.0	2.0	0.7	0.6	51.6	49.3	53.6
	2015	594	44.1	51.7	1.6	2.1	0.5	44.1	43.0	45.4
Turkey	2011	1077	44.6	33.9	15.5	5.6	0.4	44.6	47.5	42.1
	2015	909	49.9	31.9	14.1	3.4	0.7	49.9	49.7	50.2
United Arab Emirates	2011	2080	32.3	26.7	30.3	9.7	1.0	32.3	35.0	29.6
	2015	3029	33.9	25.4	30.0	10.3	0.4	33.9	35.5	32.4
United States	2011	1813	52.8	24.5	19.9	2.2	0.6	52.8	53.7	51.8
	2015	1435	46.3	29.9	19.9	2.5	1.5	46.3	44.7	47.7

International Avg (n=40)	2011	30358	41.6	35.7	17.6	4.7	0.4	41.6	43.1	40.1
	2015	30683	41.5	36.9	15.9	4.7	1.0	41.5	42.8	40.1

Ontario, Canada	2011	639	52.1	27.9	17.1	2.3	0.6	52.1	48.0	55.8
	2015	640	44.4	35.8	14.6	2.1	3.0	44.4	46.0	43.2
Quebec, Canada	2011	599	26.7	45.1	25.6	2.6	0.0	26.7	26.0	27.5
	2015	400	23.5	52.1	20.3	3.6	0.6	23.5	27.1	19.9
Norway (4)	2011	450	41.4	43.3	13.7	1.3	0.2	41.4	42.9	39.9
	2015	608	32.6	50.7	11.7	3.9	1.2	32.6	32.9	32.3
Abu Dhabi, UAE	2011	582	31.1	26.4	31.6	10.1	0.9	31.1	34.6	27.7
	2015	721	26.8	27.2	35.2	10.5	0.3	26.8	27.2	26.5
Dubai, UAE	2011	881	36.1	24.6	30.3	8.4	0.6	36.1	37.8	34.6
	2015	1063	44.0	24.6	24.6	6.6	0.2	44.0	45.4	42.6
Florida, US	2011	366	58.0	22.0	19.1	1.0	0.0	58.0	57.9	58.1
	2015	299	40.2	32.4	24.9	2.0	0.4	40.2	42.0	38.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_05 (S051193): Life Science / Applying Type: MC Key: B
Label: Celery stalk leaves turn red

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	84.3	5.4	84.3	4.2	4.9	1.0	0.2	87.7	81.1
	2015	869	82.2	5.5	82.2	5.1	4.2	1.4	1.6	84.3	80.4
Bahrain	2011	587	61.0	13.1	61.0	11.5	12.7	1.0	0.7	63.5	58.5
	2015	589	51.7	14.8	51.7	11.8	16.5	3.4	1.8	55.2	48.1
Belgium (Flemish)	2011	690	60.9	18.9	60.9	8.0	11.2	0.9	0.1	60.9	60.9
	2015	776	61.7	20.4	61.7	5.9	9.2	1.7	1.2	63.3	60.1
Chile	2011	800	59.5	12.1	59.5	6.3	18.0	2.2	1.9	60.5	58.5
	2015	684	65.8	13.1	65.8	4.2	11.3	1.5	4.0	66.6	65.1
Chinese Taipei	2011	605	76.2	13.3	76.2	2.8	7.2	0.5	0.0	71.9	80.0
	2015	611	80.7	8.7	80.7	1.3	8.1	1.1	0.0	79.1	82.4
Croatia	2011	664	78.7	8.8	78.7	2.9	7.9	1.7	0.0	79.9	77.5
	2015	575	83.8	5.7	83.8	3.6	4.0	2.6	0.3	85.2	82.5
Czech Republic	2011	659	67.8	18.1	67.8	5.6	5.5	2.4	0.7	76.0	59.8
	2015	739	69.0	16.6	69.0	6.3	4.7	2.0	1.5	66.5	71.0
Denmark	2011	573	70.3	9.1	70.3	4.8	11.9	3.5	0.4	71.6	68.9
	2015	525	73.4	9.4	73.4	3.3	8.2	1.9	3.8	73.9	72.9
England	2011	472	79.4	10.2	79.4	4.2	4.6	1.2	0.5	78.8	80.0
	2015	564	80.3	8.4	80.3	4.3	5.1	0.7	1.2	81.2	79.3
Finland	2011	660	71.7	14.8	71.7	4.3	8.3	0.7	0.1	68.8	74.7
	2015	718	66.6	17.1	66.6	6.3	5.7	3.0	1.2	66.5	66.7
Georgia	2011	670	38.3	22.9	38.3	11.9	22.7	3.3	0.9	37.2	39.3
	2015	568	39.5	18.8	39.5	10.0	23.6	4.5	3.7	38.9	40.1
Germany	2011	567	77.7	9.7	77.7	3.8	4.6	3.7	0.5	77.4	77.9
	2015	571	76.5	10.0	76.5	4.6	4.0	3.5	1.4	76.0	76.9
Hong Kong SAR	2011	566	73.7	11.5	73.7	4.4	8.4	2.0	0.0	74.9	72.7
	2015	531	77.0	11.2	77.0	3.7	7.1	0.3	0.8	78.9	75.5
Hungary	2011	737	67.9	15.9	67.9	6.4	7.7	1.5	0.6	67.7	68.0
	2015	720	69.9	17.8	69.9	3.4	5.3	1.3	2.3	67.8	71.8
Iran, Islamic Rep. of	2011	815	68.2	10.3	68.2	8.0	9.9	1.9	1.7	68.7	67.8
	2015	548	63.2	14.9	63.2	6.4	11.2	2.8	1.5	63.7	62.7
Ireland	2011	654	80.3	9.8	80.3	3.3	5.9	0.6	0.2	80.5	80.0
	2015	614	79.5	8.7	79.5	3.5	5.8	0.5	1.9	79.8	79.2
Italy	2011	604	68.8	17.5	68.8	4.3	7.7	1.3	0.4	74.3	63.3
	2015	621	71.5	16.8	71.5	2.7	4.4	3.6	1.1	73.1	70.0
Japan	2011	629	67.2	18.3	67.2	3.3	10.0	1.0	0.2	68.7	65.8
	2015	629	64.8	18.4	64.8	3.3	9.2	3.6	0.7	64.2	65.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_05 (S051193): Life Science / Applying Type: MC Key: B
Label: Celery stalk leaves turn red

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	44.0	18.8	44.0	8.3	26.0	2.2	0.7	41.6	46.6
	2015	671	54.2	19.2	54.2	8.3	16.3	1.4	0.4	55.2	53.3
Korea, Rep. of	2011	619	79.4	16.4	79.4	1.1	2.5	0.4	0.2	77.8	80.9
	2015	661	54.6	34.8	54.6	2.5	7.9	0.2	0.0	54.1	55.1
Kuwait	2011	578	49.8	15.3	49.8	12.8	14.5	6.0	1.6	52.8	46.4
	2015	518	42.7	20.2	42.7	10.8	14.0	9.5	2.8	45.6	39.7
Lithuania	2011	667	51.3	17.7	51.3	14.8	13.2	2.3	0.7	51.7	50.9
	2015	638	60.1	17.7	60.1	13.0	6.5	2.2	0.5	60.2	60.0
Morocco	2011	987	48.9	10.6	48.9	15.5	24.2	0.5	0.2	51.7	46.3
	2015	700	48.3	18.5	48.3	12.8	18.9	1.5	0.2	46.0	50.7
Netherlands	2011	458	73.7	13.4	73.7	6.8	4.6	1.0	0.5	73.1	74.0
	2015	631	69.4	18.2	69.4	4.9	4.4	1.3	1.7	69.9	68.9
New Zealand	2011	794	78.0	9.2	78.0	4.9	6.9	0.7	0.3	76.5	79.4
	2015	902	75.7	9.5	75.7	5.6	6.1	2.2	0.8	76.8	74.6
Northern Ireland	2011	516	80.7	7.0	80.7	4.0	7.3	1.0	0.0	81.5	79.9
	2015	432	79.2	7.7	79.2	4.2	8.9	0.0	0.0	78.0	81.1
Oman	2011	1488	50.5	15.3	50.5	14.3	16.3	2.2	1.4	51.6	49.3
	2015	1292	57.3	14.8	57.3	11.8	11.7	3.2	1.1	60.6	54.2
Portugal	2011	579	63.7	10.4	63.7	6.6	16.5	2.2	0.6	64.5	63.0
	2015	674	59.1	14.1	59.1	6.8	14.3	3.7	2.0	58.6	59.5
Qatar	2011	595	52.1	16.0	52.1	13.2	16.0	2.3	0.5	53.8	50.6
	2015	740	58.2	16.0	58.2	11.1	10.3	2.2	2.1	61.5	55.1
Russian Federation	2011	632	73.2	16.1	73.2	6.4	3.1	1.2	0.0	73.4	73.0
	2015	693	66.9	20.6	66.9	4.6	5.4	1.7	0.8	69.2	64.6
Saudi Arabia	2011	663	57.0	16.5	57.0	10.7	15.0	0.6	0.2	61.5	52.1
	2015	598	47.4	16.0	47.4	13.5	17.2	4.1	1.7	50.5	44.1
Serbia	2011	631	65.2	12.5	65.2	3.7	16.8	1.7	0.1	66.3	64.1
	2015	576	72.3	8.6	72.3	5.1	7.4	2.9	3.7	75.4	69.3
Singapore	2011	906	93.9	2.4	93.9	1.6	1.8	0.2	0.0	94.6	93.3
	2015	927	93.9	2.3	93.9	2.0	1.2	0.3	0.3	95.7	92.2
Slovak Republic	2011	813	72.8	9.2	72.8	5.6	10.5	2.0	0.0	72.8	72.7
	2015	835	65.0	10.3	65.0	8.0	12.8	2.4	1.5	63.7	66.4
Slovenia	2011	648	63.6	14.4	63.6	11.3	8.0	2.3	0.4	63.8	63.4
	2015	627	68.8	13.4	68.8	8.6	6.0	2.2	0.9	69.8	67.7
Spain	2011	580	65.2	16.1	65.2	8.8	8.4	1.5	0.0	67.9	62.9
	2015	1105	67.8	16.9	67.8	5.3	5.9	2.6	1.6	64.9	70.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S13_05 (S051193): Life Science / Applying Type: MC Key: B
Label: Celery stalk leaves turn red

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	59.9	20.7	59.9	6.3	9.6	2.6	0.8	54.7	64.2
	2015	594	66.5	19.3	66.5	1.0	8.5	3.0	1.7	63.9	69.4
Turkey	2011	1077	45.7	20.9	45.7	9.9	21.6	1.5	0.5	43.9	47.2
	2015	909	53.0	19.2	53.0	8.7	17.0	1.1	0.9	50.3	55.9
United Arab Emirates	2011	2080	57.1	14.3	57.1	11.7	14.1	1.6	1.3	56.9	57.2
	2015	3029	59.4	15.3	59.4	10.0	11.2	3.4	0.7	61.5	57.5
United States	2011	1813	81.3	7.4	81.3	3.7	4.5	2.2	0.9	80.4	82.2
	2015	1435	80.0	7.6	80.0	4.4	3.3	2.6	2.1	78.8	81.0

International Avg (n=40)	2011	30229	66.5	13.5	66.5	7.0	10.8	1.7	0.5	67.0	65.9
	2015	30639	66.4	14.4	66.4	6.3	9.1	2.3	1.4	66.9	66.0

Ontario, Canada	2011	639	80.4	9.4	80.4	3.2	4.5	1.5	1.0	77.6	82.9
	2015	639	80.5	8.1	80.5	3.8	3.0	1.2	3.4	80.5	80.7
Quebec, Canada	2011	600	75.8	12.1	75.8	3.0	7.8	1.3	0.0	75.7	75.9
	2015	400	69.5	12.6	69.5	3.6	9.4	2.3	2.7	72.6	66.5
Norway (4)	2011	450	66.4	7.4	66.4	11.5	12.8	1.5	0.4	63.8	69.1
	2015	608	68.5	11.1	68.5	5.8	8.1	3.8	2.7	63.0	73.3
Abu Dhabi, UAE	2011	582	55.1	14.4	55.1	12.9	15.1	1.6	0.9	54.2	55.9
	2015	721	53.3	16.9	53.3	12.8	11.7	4.8	0.5	54.8	51.8
Dubai, UAE	2011	881	65.3	12.3	65.3	8.1	11.3	1.9	1.1	67.0	63.9
	2015	1063	76.1	9.3	76.1	6.7	5.5	2.0	0.4	76.3	76.0
Florida, US	2011	366	85.7	8.2	85.7	4.1	0.8	1.1	0.0	87.4	84.0
	2015	299	81.2	9.8	81.2	4.1	2.5	1.6	0.7	85.8	77.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

SL3_06 (S051063): Physical Science / Applying Type: MC Key: B
Label: Wooden and metal cubes on balance

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	35.9	5.5	35.9	17.8	37.3	3.1	0.4	37.6	34.3
	2015	869	36.2	4.3	36.2	16.5	37.9	3.2	1.9	36.3	36.2
Bahrain	2011	587	30.4	12.0	30.4	17.2	32.2	7.1	1.1	29.2	31.5
	2015	589	31.9	11.2	31.9	17.0	28.8	9.3	1.8	35.6	28.2
Belgium (Flemish)	2011	690	36.8	3.5	36.8	8.7	47.0	3.4	0.6	36.2	37.5
	2015	776	36.5	2.7	36.5	9.9	42.9	6.9	1.2	37.7	35.3
Chile	2011	800	38.9	6.4	38.9	14.4	36.1	2.0	2.1	36.3	41.7
	2015	684	42.3	5.4	42.3	13.6	31.4	3.2	4.1	43.8	40.9
Chinese Taipei	2011	605	71.7	6.1	71.7	5.0	14.6	2.6	0.0	70.2	73.1
	2015	611	74.3	6.4	74.3	4.3	12.0	2.7	0.3	77.9	70.4
Croatia	2011	664	31.5	8.5	31.5	13.1	35.0	11.7	0.1	28.7	34.5
	2015	575	38.4	7.0	38.4	10.5	34.8	8.2	1.1	38.5	38.3
Czech Republic	2011	659	45.7	8.8	45.7	12.4	25.5	6.9	0.7	44.4	46.9
	2015	739	52.2	6.6	52.2	12.2	21.7	5.7	1.7	51.0	53.1
Denmark	2011	573	51.3	7.2	51.3	10.3	21.7	9.1	0.4	54.6	47.7
	2015	525	54.2	8.6	54.2	6.6	17.9	8.3	4.5	55.7	52.6
England	2011	472	32.7	5.5	32.7	18.5	36.5	6.3	0.5	32.1	33.4
	2015	564	33.5	8.1	33.5	22.3	29.7	5.1	1.3	38.1	28.7
Finland	2011	660	54.9	12.8	54.9	7.9	16.0	8.3	0.1	57.6	52.1
	2015	718	54.2	12.8	54.2	6.0	15.8	9.9	1.3	54.8	53.7
Georgia	2011	672	45.3	9.7	45.3	13.3	25.0	5.2	1.4	43.2	47.5
	2015	568	35.7	11.4	35.7	14.4	27.3	6.3	5.0	33.3	37.8
Germany	2011	567	24.3	5.0	24.3	25.5	35.5	8.8	0.8	23.3	25.3
	2015	571	23.4	6.9	23.4	28.1	28.5	11.2	1.8	17.2	28.8
Hong Kong SAR	2011	566	63.2	5.1	63.2	8.2	19.7	3.8	0.0	62.6	63.7
	2015	531	67.6	1.8	67.6	7.1	20.8	1.9	0.8	64.7	69.8
Hungary	2011	733	58.3	4.6	58.3	7.4	22.0	6.5	1.1	59.4	57.3
	2015	720	62.2	3.3	62.2	4.1	21.7	6.4	2.3	64.0	60.5
Iran, Islamic Rep. of	2011	815	28.3	13.5	28.3	25.4	26.1	4.7	2.0	31.7	25.0
	2015	548	28.4	10.8	28.4	21.6	31.7	5.2	2.3	32.2	24.8
Ireland	2011	654	24.7	6.8	24.7	20.1	42.9	5.4	0.2	24.6	24.8
	2015	614	24.8	9.8	24.8	18.1	41.4	3.9	1.9	23.1	26.5
Italy	2011	604	38.8	9.0	38.8	13.3	28.5	9.8	0.4	35.0	42.7
	2015	621	40.4	10.5	40.4	13.5	25.3	8.4	1.9	41.2	39.8
Japan	2011	629	79.3	2.0	79.3	2.8	12.3	3.3	0.3	79.1	79.5
	2015	629	69.0	1.4	69.0	2.6	21.7	3.4	1.8	68.5	69.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_06 (S051063): Physical Science / Applying Type: MC Key: B
Label: Wooden and metal cubes on balance

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	45.8	15.2	45.8	12.4	25.3	0.5	0.7	44.5	47.1
	2015	671	61.6	8.5	61.6	8.3	20.0	1.1	0.4	63.1	60.2
Korea, Rep. of	2011	619	73.2	2.1	73.2	6.3	17.8	0.3	0.2	69.5	76.8
	2015	661	80.3	0.8	80.3	7.3	11.3	0.1	0.2	79.9	80.7
Kuwait	2011	571	19.2	16.4	19.2	27.0	21.5	14.0	1.9	23.0	15.1
	2015	518	17.5	13.8	17.5	26.2	20.8	18.9	2.8	18.6	16.6
Lithuania	2011	667	37.7	5.3	37.7	15.1	35.1	6.1	0.8	38.1	37.3
	2015	638	40.2	4.5	40.2	9.8	40.1	4.8	0.6	40.4	40.1
Morocco	2011	894	33.4	17.8	33.4	28.8	19.3	0.4	0.2	35.6	31.4
	2015	696	36.5	13.8	36.5	17.0	27.7	4.9	0.2	36.4	36.5
Netherlands	2011	458	23.6	4.2	23.6	23.3	43.1	5.1	0.7	24.3	23.2
	2015	631	21.4	5.8	21.4	20.6	45.3	5.1	1.8	20.1	22.8
New Zealand	2011	795	24.7	6.0	24.7	21.5	37.2	10.4	0.3	26.1	23.5
	2015	902	27.6	5.2	27.6	20.7	37.8	7.6	1.1	26.1	29.1
Northern Ireland	2011	516	37.1	10.3	37.1	12.5	35.8	4.1	0.1	36.4	37.9
	2015	426	43.6	13.1	43.6	11.5	29.3	2.6	0.0	42.6	44.3
Oman	2011	1488	29.7	14.5	29.7	19.0	28.0	7.0	1.8	30.5	28.8
	2015	1288	35.0	13.4	35.0	17.9	26.3	6.2	1.2	39.5	30.7
Portugal	2011	579	59.2	7.3	59.2	9.5	19.1	3.7	1.3	58.0	60.4
	2015	674	50.1	3.3	50.1	14.0	21.1	7.9	3.5	51.1	49.3
Qatar	2011	595	29.9	10.7	29.9	19.8	28.3	10.7	0.7	33.4	26.8
	2015	740	31.9	11.7	31.9	18.7	27.5	8.0	2.2	36.6	27.5
Russian Federation	2011	632	69.4	5.5	69.4	4.7	16.9	3.4	0.0	70.0	68.9
	2015	693	72.9	4.4	72.9	3.8	15.0	3.0	0.8	77.2	68.7
Saudi Arabia	2011	647	37.3	15.3	37.3	21.4	22.6	3.1	0.2	39.0	35.6
	2015	433	26.8	15.4	26.8	19.9	17.5	17.3	3.2	28.3	25.1
Serbia	2011	631	45.6	7.8	45.6	10.3	24.2	11.9	0.1	46.7	44.6
	2015	576	41.7	4.5	41.7	10.9	29.4	8.7	4.8	46.3	37.2
Singapore	2011	906	64.7	2.5	64.7	5.3	27.0	0.4	0.0	63.5	66.0
	2015	927	68.3	1.8	68.3	5.8	23.5	0.2	0.3	66.3	70.3
Slovak Republic	2011	813	51.8	5.3	51.8	7.5	30.1	5.2	0.0	50.4	53.2
	2015	835	48.1	4.4	48.1	11.4	30.7	3.9	1.5	46.6	49.6
Slovenia	2011	634	39.9	9.4	39.9	11.7	30.2	8.5	0.4	42.7	37.7
	2015	627	42.7	7.3	42.7	12.0	30.6	6.2	1.2	42.1	43.4
Spain	2011	580	38.3	9.0	38.3	20.7	25.3	6.3	0.3	37.9	38.6
	2015	1105	44.3	9.3	44.3	13.8	24.7	6.3	1.6	48.9	39.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SI3_06 (\$051063): Physical Science / Applying Type: MC Key: B
Label: Wooden and metal cubes on balance

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	32.3	6.5	32.3	25.2	25.4	9.8	0.8	34.0	30.8
	2015	594	30.9	8.8	30.9	22.2	22.8	13.2	2.1	32.1	29.3
Turkey	2011	1077	37.5	8.1	37.5	10.7	42.1	1.2	0.5	37.7	37.2
	2015	909	39.0	5.8	39.0	11.1	41.7	1.2	1.2	39.9	38.1
United Arab Emirates	2011	2080	30.7	12.0	30.7	16.4	32.6	6.9	1.4	31.0	30.4
	2015	3029	37.1	9.6	37.1	16.8	29.9	5.7	0.9	35.6	38.4
United States	2011	1813	42.3	4.0	42.3	14.3	35.2	3.2	0.9	42.5	42.1
	2015	1435	43.3	3.8	43.3	16.0	30.7	3.6	2.5	42.3	44.2

International Avg (n=40)	2011	30098	42.4	8.2	42.4	14.6	28.4	5.8	0.6	42.5	42.3
	2015	30460	43.6	7.4	43.6	13.6	27.4	6.1	1.8	44.3	42.9

Ontario, Canada	2011	639	37.7	5.0	37.7	14.8	35.2	6.1	1.2	37.7	37.7
	2015	626	37.4	4.3	37.4	13.4	38.2	3.1	3.6	37.7	37.2
Quebec, Canada	2011	600	46.2	6.4	46.2	13.5	28.8	5.0	0.0	48.2	44.1
	2015	376	45.6	7.0	45.6	14.2	27.0	2.5	3.6	45.3	45.8
Norway (4)	2011	450	19.5	11.1	19.5	22.7	34.5	11.7	0.5	22.0	16.9
	2015	608	23.2	7.8	23.2	22.8	33.5	9.0	3.8	21.7	24.4
Abu Dhabi, UAE	2011	582	28.3	12.9	28.3	17.3	32.8	7.7	0.9	31.5	25.3
	2015	721	33.1	10.2	33.1	20.2	27.8	7.8	0.9	32.3	33.7
Dubai, UAE	2011	881	33.6	8.6	33.6	13.4	35.9	7.2	1.4	33.2	33.9
	2015	1063	43.9	7.2	43.9	15.3	29.5	3.8	0.4	43.3	44.5
Florida, US	2011	366	51.6	4.0	51.6	12.5	30.2	1.5	0.2	49.3	53.9
	2015	299	38.6	3.0	38.6	19.7	36.0	1.4	1.4	37.9	39.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

Sl3_07 (S051012): Physical Science / Applying Type: MC Key: C
Label: Two metal bars

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	53.7	21.3	12.6	53.7	10.1	1.8	0.7	50.5	56.7
	2015	869	57.8	17.7	10.3	57.8	8.8	3.5	1.9	57.8	57.9
Bahrain	2011	587	46.8	20.1	18.8	46.8	11.8	1.5	1.1	43.1	50.4
	2015	589	52.7	14.6	16.2	52.7	12.4	2.0	2.1	53.6	51.8
Belgium (Flemish)	2011	690	50.9	25.6	13.1	50.9	8.7	1.1	0.7	48.9	52.9
	2015	776	50.7	20.7	11.7	50.7	11.5	3.8	1.6	52.7	48.8
Chile	2011	800	47.5	18.4	10.9	47.5	18.0	2.5	2.7	41.5	54.1
	2015	684	41.8	15.0	16.1	41.8	18.4	3.6	5.0	44.7	39.1
Chinese Taipei	2011	605	79.6	7.1	8.4	79.6	4.0	0.8	0.2	74.1	84.5
	2015	611	81.1	7.0	6.5	81.1	4.4	0.8	0.3	82.1	80.0
Croatia	2011	664	59.9	16.6	13.2	59.9	9.0	1.0	0.1	60.4	59.4
	2015	575	66.7	11.2	9.9	66.7	10.0	1.1	1.1	63.5	69.6
Czech Republic	2011	659	63.7	15.6	10.4	63.7	7.1	2.3	0.9	58.2	68.9
	2015	739	61.2	14.4	10.8	61.2	8.9	2.2	2.5	56.1	65.3
Denmark	2011	573	65.5	15.2	9.2	65.5	5.9	3.0	1.1	67.8	62.9
	2015	525	58.5	19.9	9.3	58.5	4.4	3.1	4.8	55.9	61.2
England	2011	472	62.9	17.8	10.2	62.9	7.3	1.1	0.8	55.1	70.0
	2015	564	57.9	20.3	10.4	57.9	8.4	1.5	1.5	53.7	62.2
Finland	2011	660	76.7	12.8	6.6	76.7	3.2	0.6	0.1	77.2	76.1
	2015	718	68.5	14.1	10.0	68.5	4.5	1.7	1.3	64.4	72.5
Georgia	2011	672	37.3	16.0	10.8	37.3	30.1	4.2	1.6	38.2	36.4
	2015	568	40.2	14.1	10.9	40.2	24.6	4.7	5.5	37.4	42.7
Germany	2011	567	60.5	17.4	11.8	60.5	6.8	2.7	0.8	55.2	65.5
	2015	571	66.3	13.2	8.2	66.3	7.2	2.9	2.2	67.3	65.3
Hong Kong SAR	2011	566	63.8	13.6	9.7	63.8	11.7	1.1	0.0	61.4	65.9
	2015	531	68.1	14.0	9.3	68.1	7.3	0.5	0.8	63.3	71.9
Hungary	2011	737	63.5	11.5	8.4	63.5	14.6	1.0	1.0	59.9	66.9
	2015	720	67.6	10.9	6.7	67.6	10.5	1.6	2.7	63.6	71.1
Iran, Islamic Rep. of	2011	815	62.8	7.7	12.7	62.8	13.6	0.9	2.4	60.7	64.9
	2015	548	52.4	9.7	12.0	52.4	19.2	4.2	2.5	53.3	51.5
Ireland	2011	654	60.4	16.7	9.5	60.4	11.3	1.9	0.2	59.1	61.7
	2015	614	58.3	17.7	12.1	58.3	8.9	0.8	2.2	58.5	58.2
Italy	2011	604	51.0	19.9	10.6	51.0	15.6	2.3	0.7	48.8	53.1
	2015	621	50.1	17.4	12.2	50.1	15.2	3.1	2.1	45.3	54.9
Japan	2011	629	84.9	5.8	6.3	84.9	2.5	0.2	0.3	85.6	84.2
	2015	629	84.2	6.0	4.6	84.2	3.0	0.3	1.8	82.0	86.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SI3_07 (S051012): Physical Science / Applying Type: MC Key: C
Label: Two metal bars

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	51.2	17.9	16.2	51.2	12.8	1.2	0.8	47.2	55.3
	2015	671	56.5	14.1	15.8	56.5	12.5	0.4	0.7	57.8	55.4
Korea, Rep. of	2011	619	86.6	5.8	5.7	86.6	1.6	0.2	0.2	86.0	87.1
	2015	661	90.6	5.2	2.7	90.6	1.1	0.2	0.2	91.5	89.9
Kuwait	2011	571	33.9	18.8	23.8	33.9	14.0	7.0	2.4	36.5	31.1
	2015	518	37.6	14.8	20.5	37.6	9.2	15.0	3.0	43.1	32.3
Lithuania	2011	667	52.3	20.1	16.8	52.3	8.4	1.3	1.0	49.7	54.7
	2015	638	57.6	20.6	12.8	57.6	7.4	1.1	0.6	57.5	57.6
Morocco	2011	968	31.0	18.6	31.8	31.0	18.2	0.2	0.2	30.1	31.8
	2015	685	38.3	17.5	26.4	38.3	14.3	3.4	0.2	42.8	33.6
Netherlands	2011	458	59.8	20.7	10.2	59.8	7.3	1.3	0.7	63.1	57.0
	2015	632	47.1	26.8	13.5	47.1	8.5	1.9	2.2	45.8	48.4
New Zealand	2011	795	52.6	20.3	13.3	52.6	9.3	4.2	0.3	48.9	56.0
	2015	902	53.2	19.4	12.2	53.2	10.4	3.4	1.4	50.5	56.1
Northern Ireland	2011	516	58.3	20.1	10.1	58.3	9.5	1.7	0.4	55.8	61.1
	2015	427	51.5	21.3	9.6	51.5	17.2	0.4	0.0	46.9	56.4
Oman	2011	1488	40.3	18.5	21.7	40.3	14.9	2.1	2.5	42.2	38.4
	2015	1290	46.5	14.6	20.5	46.5	14.0	3.1	1.4	49.2	44.0
Portugal	2011	579	53.1	14.7	12.9	53.1	17.1	0.8	1.4	46.0	59.4
	2015	674	48.8	16.0	10.9	48.8	16.9	2.9	4.4	46.1	51.3
Qatar	2011	595	40.2	21.9	22.5	40.2	12.1	2.5	0.9	43.9	37.1
	2015	740	42.5	17.6	20.0	42.5	13.4	4.0	2.5	43.5	41.6
Russian Federation	2011	632	76.5	8.2	7.7	76.5	6.9	0.5	0.2	73.9	78.9
	2015	693	72.9	8.2	8.3	72.9	7.9	1.6	1.1	68.3	77.4
Saudi Arabia	2011	661	41.6	18.3	19.8	41.6	18.0	1.9	0.4	45.5	37.4
	2015	596	36.0	21.2	22.3	36.0	14.1	4.2	2.3	45.2	25.5
Serbia	2011	631	57.3	14.1	8.9	57.3	17.4	1.7	0.6	48.6	65.4
	2015	576	56.5	12.8	10.2	56.5	12.2	2.8	5.5	52.9	59.8
Singapore	2011	906	83.5	5.4	7.5	83.5	2.9	0.7	0.0	82.0	85.1
	2015	927	86.5	5.3	5.4	86.5	2.2	0.4	0.3	85.3	87.6
Slovak Republic	2011	813	65.0	13.1	9.1	65.0	11.0	1.7	0.0	61.8	68.4
	2015	835	61.9	10.2	10.1	61.9	13.1	2.8	1.9	64.1	59.7
Slovenia	2011	648	71.0	12.9	6.7	71.0	6.8	1.6	1.0	68.6	72.9
	2015	627	71.7	12.4	5.4	71.7	6.9	1.9	1.6	67.8	75.5
Spain	2011	580	54.0	16.8	15.0	54.0	10.9	2.9	0.3	49.1	58.2
	2015	1105	55.6	16.2	11.5	55.6	11.6	3.3	1.8	52.8	58.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SI3_07 (S051012): Physical Science / Applying Type: MC Key: C
Label: Two metal bars

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	66.5	15.1	9.3	66.5	5.9	1.8	1.3	62.1	70.2
	2015	594	66.2	12.6	9.7	66.2	3.8	3.9	3.8	62.4	70.5
Turkey	2011	1077	41.4	18.4	15.7	41.4	22.2	1.8	0.5	36.4	45.6
	2015	909	51.4	16.9	12.9	51.4	16.3	1.0	1.4	45.2	57.8
United Arab Emirates	2011	2080	45.7	19.5	20.6	45.7	11.0	1.6	1.6	46.8	44.6
	2015	3027	49.7	16.8	17.2	49.7	11.2	4.1	1.1	49.4	49.9
United States	2011	1813	67.2	13.2	7.6	67.2	7.4	3.6	1.0	66.4	68.1
	2015	1435	64.4	11.6	8.7	64.4	9.5	2.8	3.0	63.7	65.1

International Avg (n=40)	2011	30204	58.0	15.8	12.7	58.0	10.9	1.8	0.8	55.9	60.0
	2015	30614	58.2	14.7	11.8	58.2	10.5	2.6	2.1	57.2	59.1

Ontario, Canada	2011	639	65.4	14.9	8.4	65.4	7.7	1.7	1.8	61.7	68.8
	2015	639	61.7	13.5	8.1	61.7	9.6	2.4	4.8	59.4	63.8
Quebec, Canada	2011	600	62.6	15.9	8.0	62.6	10.9	2.3	0.3	56.3	69.2
	2015	400	53.1	16.6	13.6	53.1	9.8	3.3	3.5	50.6	55.5
Norway (4)	2011	450	50.5	24.6	12.0	50.5	10.7	1.4	0.7	47.0	54.1
	2015	608	49.0	19.4	10.3	49.0	10.1	5.9	5.3	41.0	55.8
Abu Dhabi, UAE	2011	582	43.5	19.2	22.3	43.5	11.8	1.8	1.3	44.1	43.0
	2015	720	43.1	17.9	19.3	43.1	12.7	5.8	1.1	43.9	42.5
Dubai, UAE	2011	881	51.5	20.4	15.4	51.5	9.7	1.5	1.5	51.6	51.4
	2015	1062	60.0	14.4	13.8	60.0	8.4	3.0	0.4	59.5	60.6
Florida, US	2011	366	68.6	13.6	6.2	68.6	9.6	1.8	0.2	69.2	68.1
	2015	299	64.6	14.1	8.4	64.6	8.8	2.7	1.4	67.8	62.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

SL3_08 (S051115): Physical Science / Applying Type: CR 1 Point
Label: Drops of wax on a metal frame

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	50.2	46.8	2.2	0.7	50.2	53.3	47.3
	2015	869	52.9	42.9	1.8	2.4	52.9	54.7	51.4
Bahrain	2011	587	33.1	63.7	2.0	1.3	33.1	35.9	30.3
	2015	589	39.7	53.1	5.2	2.1	39.7	49.7	29.6
Belgium (Flemish)	2011	690	63.0	35.0	1.3	0.7	63.0	66.2	59.6
	2015	776	57.9	36.9	3.2	2.0	57.9	60.9	55.0
Chile	2011	800	38.9	54.2	3.6	3.3	38.9	36.7	41.3
	2015	684	39.6	46.8	8.3	5.2	39.6	42.1	37.3
Chinese Taipei	2011	605	64.5	34.3	1.1	0.2	64.5	63.9	65.1
	2015	611	67.6	31.6	0.5	0.3	67.6	67.6	67.5
Croatia	2011	664	52.0	43.3	4.3	0.4	52.0	53.9	50.0
	2015	575	52.5	40.7	5.1	1.6	52.5	50.0	54.9
Czech Republic	2011	659	53.5	41.7	3.6	1.2	53.5	55.3	51.8
	2015	739	61.1	32.6	3.7	2.6	61.1	60.0	62.0
Denmark	2011	573	50.1	45.8	2.8	1.3	50.1	55.6	44.1
	2015	525	47.8	44.7	2.6	4.9	47.8	49.3	46.2
England	2011	472	54.7	42.2	2.4	0.8	54.7	59.6	50.2
	2015	563	55.8	40.0	2.7	1.5	55.8	57.9	53.6
Finland	2011	660	67.2	32.4	0.3	0.1	67.2	64.8	69.8
	2015	718	59.6	34.0	4.9	1.5	59.6	62.1	57.3
Georgia	2011	671	25.1	69.2	3.9	1.9	25.1	28.2	22.0
	2015	568	30.0	51.2	13.3	5.5	30.0	32.4	27.9
Germany	2011	567	57.7	36.8	4.5	1.1	57.7	55.7	59.6
	2015	571	56.3	36.1	5.2	2.4	56.3	57.7	54.9
Hong Kong SAR	2011	566	57.7	41.4	0.8	0.0	57.7	61.4	54.8
	2015	531	74.4	24.2	0.6	0.8	74.4	75.4	73.7
Hungary	2011	736	50.1	47.5	1.3	1.1	50.1	49.8	50.4
	2015	720	55.5	38.8	2.8	2.8	55.5	56.2	54.9
Iran, Islamic Rep. of	2011	815	24.7	69.3	3.6	2.5	24.7	21.1	28.2
	2015	548	24.3	67.3	5.6	2.8	24.3	27.3	21.5
Ireland	2011	654	50.0	47.9	1.9	0.2	50.0	50.0	49.9
	2015	614	52.0	44.0	1.9	2.2	52.0	53.6	50.2
Italy	2011	604	58.9	36.8	3.6	0.7	58.9	56.9	61.0
	2015	620	54.2	38.6	5.0	2.2	54.2	54.9	53.6
Japan	2011	629	76.1	23.3	0.3	0.3	76.1	76.5	75.7
	2015	629	61.7	36.3	0.2	1.8	61.7	61.9	61.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_08 (S051115): Physical Science / Applying Type: CR 1 Point
Label: Drops of wax on a metal frame

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	39.3	47.1	12.8	0.9	39.3	37.4	41.1
	2015	671	57.0	40.6	1.7	0.7	57.0	60.0	54.2
Korea, Rep. of	2011	619	82.7	17.0	0.2	0.2	82.7	82.5	82.8
	2015	661	76.2	23.1	0.5	0.2	76.2	78.1	74.5
Kuwait	2011	583	11.0	79.6	6.5	2.9	11.0	15.1	6.6
	2015	518	12.4	73.1	11.2	3.2	12.4	13.1	12.0
Lithuania	2011	667	43.2	53.8	1.8	1.1	43.2	48.6	38.3
	2015	638	58.7	37.9	2.8	0.6	58.7	64.5	52.6
Morocco	2011	1111	4.8	87.2	5.5	2.5	4.8	4.7	4.8
	2015	728	14.3	77.6	4.7	3.4	14.3	15.2	13.2
Netherlands	2011	458	60.5	37.6	1.0	0.9	60.5	62.2	58.1
	2015	632	56.5	39.0	1.6	2.9	56.5	62.6	50.3
New Zealand	2011	795	42.3	54.2	3.1	0.4	42.3	42.8	41.8
	2015	902	47.7	47.0	3.8	1.5	47.7	48.2	47.1
Northern Ireland	2011	516	49.8	48.4	1.4	0.4	49.8	47.6	52.3
	2015	440	46.2	50.3	2.7	0.8	46.2	48.1	43.7
Oman	2011	1488	14.7	79.9	2.6	2.8	14.7	18.0	11.3
	2015	1294	27.7	66.3	4.5	1.4	27.7	32.2	23.5
Portugal	2011	579	60.1	35.6	2.4	1.9	60.1	59.8	60.3
	2015	674	52.6	38.3	4.2	4.9	52.6	52.0	53.2
Qatar	2011	595	24.0	72.4	2.3	1.3	24.0	28.9	19.8
	2015	740	28.7	64.5	3.3	3.5	28.7	33.1	24.5
Russian Federation	2011	632	57.8	41.0	1.0	0.2	57.8	64.5	51.5
	2015	693	63.7	31.8	3.3	1.2	63.7	67.6	59.9
Saudi Arabia	2011	663	36.6	61.5	1.4	0.5	36.6	44.4	28.2
	2015	600	15.5	77.5	4.5	2.6	15.5	23.3	6.7
Serbia	2011	631	57.4	39.2	2.7	0.7	57.4	59.2	55.7
	2015	576	53.7	35.4	4.4	6.4	53.7	56.0	51.6
Singapore	2011	906	77.6	22.3	0.1	0.0	77.6	81.7	73.2
	2015	927	80.8	18.8	0.1	0.3	80.8	80.5	81.0
Slovak Republic	2011	813	55.9	42.5	1.5	0.0	55.9	56.3	55.6
	2015	835	56.5	38.1	3.3	2.2	56.5	59.0	53.9
Slovenia	2011	649	52.4	45.0	1.7	1.0	52.4	48.0	56.0
	2015	627	55.4	40.0	2.9	1.7	55.4	52.2	58.5
Spain	2011	580	51.1	44.6	3.7	0.5	51.1	48.4	53.5
	2015	1105	60.0	35.0	3.1	1.9	60.0	58.4	61.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SI3_08 (S051115): Physical Science / Applying Type: CR 1 Point
Label: Drops of wax on a metal frame

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT

Sweden	2011	654	52.3	41.5	4.9	1.3	52.3	51.3	53.1
	2015	594	57.1	34.3	4.5	4.1	57.1	56.5	57.9
Turkey	2011	1077	38.0	59.9	1.5	0.7	38.0	38.4	37.6
	2015	909	33.8	63.2	1.3	1.7	33.8	32.2	35.5
United Arab Emirates	2011	2080	26.2	70.7	1.4	1.6	26.2	27.4	25.1
	2015	3029	32.2	63.2	3.3	1.3	32.2	33.7	30.8
United States	2011	1813	59.9	36.8	2.2	1.2	59.9	60.1	59.7
	2015	1435	57.0	38.0	1.7	3.2	57.0	55.4	58.4

International Avg (n=40)	2011	30360	48.1	48.2	2.6	1.0	48.1	49.3	46.9
	2015	30678	49.7	44.3	3.7	2.4	49.7	51.4	47.9

Ontario, Canada	2011	639	60.9	35.4	1.5	2.1	60.9	59.9	61.8
	2015	640	55.4	36.9	2.0	5.6	55.4	54.7	56.2
Quebec, Canada	2011	600	59.3	36.6	3.5	0.6	59.3	56.4	62.5
	2015	400	55.5	35.6	5.3	3.7	55.5	59.6	51.6
Norway (4)	2011	450	41.4	54.8	2.9	0.8	41.4	45.2	37.6
	2015	608	39.9	48.3	5.6	6.2	39.9	38.1	41.4
Abu Dhabi, UAE	2011	582	23.8	73.5	1.4	1.3	23.8	26.3	21.4
	2015	721	26.1	69.2	3.4	1.3	26.1	27.9	24.4
Dubai, UAE	2011	881	36.5	60.1	1.8	1.6	36.5	37.6	35.5
	2015	1063	47.4	49.7	2.4	0.5	47.4	47.4	47.3
Florida, US	2011	366	53.1	45.1	1.3	0.5	53.1	55.8	50.3
	2015	299	54.1	43.0	0.8	2.1	54.1	59.6	49.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

SL3_09 (S051180): Physical Science / Reasoning Type: MC Key: C
Label: Object inside a wooden box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	59.7	22.1	4.2	59.7	11.7	1.4	0.9	59.7	59.8
	2015	869	62.5	17.6	3.8	62.5	11.0	2.6	2.6	59.6	64.9
Bahrain	2011	587	62.3	22.9	3.6	62.3	9.0	0.6	1.5	62.7	62.0
	2015	589	55.8	25.8	6.2	55.8	7.7	1.4	3.1	55.2	56.4
Belgium (Flemish)	2011	690	62.2	18.8	4.7	62.2	12.7	0.9	0.7	61.7	62.7
	2015	776	59.7	21.9	2.3	59.7	10.8	3.1	2.2	58.6	60.7
Chile	2011	800	51.7	23.0	5.5	51.7	14.7	1.6	3.5	50.7	52.9
	2015	683	48.8	22.5	3.4	48.8	14.9	4.2	6.2	44.8	52.6
Chinese Taipei	2011	605	94.1	2.9	1.1	94.1	1.6	0.2	0.2	92.3	95.8
	2015	611	90.6	5.9	0.8	90.6	1.6	0.8	0.3	88.6	92.7
Croatia	2011	664	50.4	32.5	3.1	50.4	10.6	3.0	0.4	44.2	57.1
	2015	575	53.8	20.3	7.4	53.8	14.0	2.5	1.9	50.4	57.0
Czech Republic	2011	659	61.4	19.6	2.1	61.4	13.5	1.8	1.7	61.2	61.5
	2015	739	65.2	18.0	2.1	65.2	9.6	2.0	3.1	59.4	70.0
Denmark	2011	573	70.8	14.2	4.1	70.8	7.1	2.3	1.4	68.8	73.0
	2015	525	70.8	14.6	2.6	70.8	5.1	1.6	5.4	71.0	70.6
England	2011	472	80.7	9.7	3.4	80.7	3.4	2.0	0.8	77.0	84.0
	2015	564	78.3	10.0	2.5	78.3	5.3	1.8	2.1	76.7	79.9
Finland	2011	660	73.8	17.7	3.1	73.8	3.9	1.4	0.1	73.5	74.0
	2015	718	67.9	15.3	1.8	67.9	7.7	5.0	2.3	63.2	72.5
Georgia	2011	672	50.5	24.5	7.9	50.5	11.8	3.1	2.1	50.6	50.4
	2015	568	53.0	20.1	9.6	53.0	8.9	3.0	5.5	52.0	53.9
Germany	2011	567	80.6	6.7	2.4	80.6	5.5	3.5	1.2	79.2	82.0
	2015	571	75.0	7.8	2.8	75.0	6.3	5.2	2.9	70.7	78.6
Hong Kong SAR	2011	566	84.2	5.9	2.0	84.2	6.9	1.0	0.0	80.0	87.7
	2015	531	86.2	5.7	1.4	86.2	5.8	0.0	0.9	81.8	89.6
Hungary	2011	737	62.4	15.7	3.3	62.4	14.7	2.4	1.5	58.1	66.5
	2015	720	65.0	16.8	2.1	65.0	8.3	3.8	4.0	59.3	69.9
Iran, Islamic Rep. of	2011	815	68.8	16.6	4.6	68.8	3.3	3.8	2.9	68.7	68.9
	2015	548	62.8	19.5	7.3	62.8	3.8	3.1	3.5	69.9	56.1
Ireland	2011	654	71.8	15.7	3.3	71.8	7.6	1.5	0.2	72.1	71.5
	2015	614	64.7	18.4	2.5	64.7	10.0	2.0	2.3	62.3	67.2
Italy	2011	604	66.5	16.0	3.5	66.5	10.9	2.2	0.9	69.0	64.1
	2015	621	65.1	16.6	2.5	65.1	9.5	3.9	2.4	65.6	64.7
Japan	2011	629	97.5	0.3	0.7	97.5	1.2	0.0	0.3	96.2	98.7
	2015	629	94.4	1.1	0.6	94.4	1.4	0.6	1.8	93.7	95.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_09 (S051180): Physical Science / Reasoning Type: MC Key: C
Label: Object inside a wooden box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	61.6	15.0	8.6	61.6	11.4	1.6	1.8	58.8	64.4
	2015	671	78.9	9.0	3.0	78.9	6.9	1.6	0.7	78.2	79.5
Korea, Rep. of	2011	619	87.3	6.5	0.4	87.3	5.0	0.5	0.2	84.4	90.1
	2015	661	85.1	8.1	0.7	85.1	5.9	0.0	0.2	81.9	87.8
Kuwait	2011	578	38.8	33.6	7.0	38.8	12.2	5.7	2.8	34.2	43.9
	2015	518	31.9	32.0	7.3	31.9	14.7	10.2	3.9	33.9	30.3
Lithuania	2011	667	54.9	25.7	5.9	54.9	10.6	1.4	1.4	48.2	61.0
	2015	638	66.0	16.8	3.8	66.0	9.8	2.5	1.2	64.1	68.0
Morocco	2011	942	53.7	24.4	12.9	53.7	8.3	0.5	0.3	50.4	56.7
	2015	687	62.8	22.9	7.1	62.8	4.7	2.3	0.2	58.5	67.2
Netherlands	2011	458	65.8	16.8	2.3	65.8	13.5	0.6	0.9	61.4	70.2
	2015	632	68.7	9.5	2.9	68.7	13.6	1.6	3.6	63.5	74.1
New Zealand	2011	795	64.7	17.7	3.8	64.7	11.5	2.0	0.4	60.8	68.2
	2015	902	63.0	15.5	3.4	63.0	11.9	4.5	1.8	59.1	67.0
Northern Ireland	2011	516	70.7	12.6	2.5	70.7	12.1	1.7	0.4	66.5	75.4
	2015	431	66.0	16.6	4.0	66.0	12.8	0.6	0.0	66.8	65.6
Oman	2011	1488	64.4	15.6	5.7	64.4	8.3	3.2	2.8	63.7	65.2
	2015	1292	75.8	9.9	4.2	75.8	6.0	2.5	1.6	77.4	74.2
Portugal	2011	579	68.7	12.8	3.1	68.7	12.4	1.1	1.9	64.3	72.5
	2015	674	58.9	15.8	3.1	58.9	12.2	3.8	6.1	59.2	58.7
Qatar	2011	595	60.2	21.3	5.6	60.2	9.9	1.6	1.4	60.1	60.3
	2015	740	59.1	19.1	6.0	59.1	9.3	2.9	3.6	61.8	56.6
Russian Federation	2011	632	66.7	20.7	4.1	66.7	6.7	1.7	0.2	66.9	66.5
	2015	693	68.1	15.5	3.0	68.1	9.6	2.1	1.6	67.2	68.9
Saudi Arabia	2011	660	51.6	26.6	6.7	51.6	13.4	0.8	0.9	52.5	50.6
	2015	598	41.9	33.4	6.4	41.9	11.9	3.2	3.2	49.8	33.1
Serbia	2011	630	70.2	14.1	4.1	70.2	9.0	1.8	0.8	64.7	75.4
	2015	576	69.9	14.2	2.0	69.9	4.5	2.9	6.6	68.1	71.6
Singapore	2011	906	87.8	4.9	2.0	87.8	5.3	0.0	0.0	85.7	90.0
	2015	927	86.3	5.2	1.5	86.3	5.9	0.8	0.3	84.3	88.2
Slovak Republic	2011	813	77.2	14.0	1.8	77.2	4.3	2.5	0.3	71.0	83.8
	2015	835	68.8	14.6	3.7	68.8	7.2	3.2	2.4	62.9	74.8
Slovenia	2011	648	76.3	12.9	2.4	76.3	5.3	1.9	1.2	68.9	82.1
	2015	627	75.5	12.4	1.6	75.5	6.7	1.5	2.4	72.6	78.3
Spain	2011	580	57.1	21.0	4.3	57.1	15.2	1.7	0.8	48.2	64.6
	2015	1105	60.4	19.8	1.6	60.4	11.0	4.4	2.8	54.2	66.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SI3_09 (S051180): Physical Science / Reasoning Type: MC Key: C
Label: Object inside a wooden box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	60.9	25.8	2.3	60.9	7.9	1.7	1.4	53.9	66.6
	2015	594	67.6	12.8	1.5	67.6	8.9	4.6	4.6	65.2	70.0
Turkey	2011	1077	53.8	25.0	6.9	53.8	12.4	1.3	0.7	51.2	56.0
	2015	909	49.8	24.5	6.9	49.8	15.3	1.5	2.0	49.1	50.6
United Arab Emirates	2011	2080	55.6	22.9	6.6	55.6	11.4	1.9	1.7	55.7	55.5
	2015	3029	58.8	20.5	5.6	58.8	10.3	3.3	1.6	55.7	61.6
United States	2011	1813	83.8	7.5	2.4	83.8	3.9	1.0	1.4	80.5	87.3
	2015	1435	80.3	8.6	1.8	80.3	3.5	1.9	3.9	79.1	81.3

International Avg (n=40)	2011	30183	67.0	17.1	4.1	67.0	9.0	1.7	1.1	64.4	69.5
	2015	30625	66.6	15.9	3.6	66.6	8.6	2.7	2.7	64.9	68.2

Ontario, Canada	2011	639	70.5	14.3	1.0	70.5	10.2	1.6	2.5	65.1	75.2
	2015	639	62.5	16.3	2.3	62.5	10.5	2.2	6.3	63.5	61.8
Quebec, Canada	2011	600	64.2	16.0	4.0	64.2	13.1	1.8	0.8	59.1	69.7
	2015	397	63.1	11.8	3.2	63.1	14.8	3.1	3.9	55.3	70.7
Norway (4)	2011	450	56.2	20.2	3.0	56.2	15.7	4.0	1.0	57.7	54.5
	2015	608	46.0	21.7	4.3	46.0	17.2	3.5	7.3	41.5	49.9
Abu Dhabi, UAE	2011	582	61.8	20.4	6.5	61.8	8.5	1.4	1.3	63.8	60.0
	2015	721	54.5	22.9	5.3	54.5	11.7	3.6	1.9	49.8	58.9
Dubai, UAE	2011	881	59.8	18.8	6.1	59.8	11.3	2.3	1.6	60.8	58.9
	2015	1063	69.3	15.7	4.8	69.3	6.5	3.0	0.7	67.5	70.9
Florida, US	2011	366	79.4	9.5	2.4	79.4	7.3	1.0	0.5	74.7	84.1
	2015	299	73.6	14.9	2.1	73.6	5.6	1.6	2.1	74.0	73.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

SL3_10 (S051106): Earth Science / Applying Type: MC Key: D
Label: Amount of water and land on Earth

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	35.8	13.0	12.1	34.2	35.8	3.6	1.4	35.0	36.5
	2015	869	34.4	10.8	11.3	35.9	34.4	4.6	3.0	33.1	35.5
Bahrain	2011	587	39.4	22.4	9.4	23.7	39.4	3.7	1.5	37.1	41.7
	2015	589	37.5	18.6	10.7	23.7	37.5	5.8	3.7	33.4	41.8
Belgium (Flemish)	2011	690	43.3	13.3	9.8	31.5	43.3	1.2	1.0	38.5	48.3
	2015	776	37.7	11.8	11.0	34.3	37.7	2.7	2.5	33.7	41.6
Chile	2011	800	31.9	16.0	13.6	29.8	31.9	3.6	5.1	31.5	32.3
	2015	683	30.7	15.1	13.0	28.8	30.7	5.4	7.0	26.3	34.8
Chinese Taipei	2011	605	55.4	7.8	6.4	28.7	55.4	1.4	0.3	48.7	61.4
	2015	611	55.8	8.2	8.4	24.9	55.8	2.2	0.6	46.3	65.8
Croatia	2011	664	55.8	8.7	7.6	21.6	55.8	5.7	0.6	51.6	60.4
	2015	575	54.1	5.4	8.4	26.2	54.1	3.2	2.7	50.4	57.4
Czech Republic	2011	659	33.9	12.6	13.3	33.9	33.9	4.1	2.2	28.7	39.0
	2015	739	35.1	9.3	15.7	32.9	35.1	3.5	3.4	30.3	39.0
Denmark	2011	573	45.8	2.1	10.0	35.3	45.8	4.6	2.1	39.4	52.8
	2015	525	44.8	3.6	8.6	33.4	44.8	3.5	6.1	38.5	51.4
England	2011	472	38.6	14.3	11.6	30.0	38.6	4.2	1.3	33.1	43.6
	2015	564	39.0	15.7	9.1	30.9	39.0	2.7	2.6	32.6	45.7
Finland	2011	660	50.5	8.6	9.0	30.0	50.5	1.7	0.2	45.3	55.8
	2015	718	47.0	6.8	9.6	29.9	47.0	4.0	2.7	43.6	50.2
Georgia	2011	667	47.3	16.6	5.8	21.5	47.3	5.8	3.0	43.8	50.9
	2015	568	57.4	14.7	5.5	11.5	57.4	5.2	5.8	58.2	56.7
Germany	2011	567	40.7	14.1	8.2	27.6	40.7	7.6	1.9	34.1	47.0
	2015	571	40.7	14.9	7.7	24.8	40.7	6.7	5.3	34.0	46.6
Hong Kong SAR	2011	566	62.4	3.3	12.8	20.1	62.4	1.5	0.0	55.6	68.0
	2015	531	64.8	3.6	11.1	17.0	64.8	2.5	0.9	54.0	73.2
Hungary	2011	737	60.1	8.2	5.9	21.1	60.1	2.3	2.3	58.2	61.9
	2015	720	57.9	8.1	7.1	18.0	57.9	3.0	5.9	54.9	60.6
Iran, Islamic Rep. of	2011	815	38.2	21.1	8.0	21.0	38.2	7.0	4.8	37.7	38.7
	2015	548	32.4	19.5	11.7	24.2	32.4	7.7	4.4	28.3	36.4
Ireland	2011	654	41.4	16.7	9.9	27.8	41.4	3.3	1.0	40.1	42.9
	2015	614	46.9	8.9	9.0	30.1	46.9	2.0	3.1	42.0	51.8
Italy	2011	604	37.9	30.2	6.0	20.0	37.9	4.4	1.5	36.7	39.2
	2015	621	36.7	25.0	9.3	18.4	36.7	7.3	3.3	32.6	40.8
Japan	2011	629	37.0	4.3	17.7	38.5	37.0	2.2	0.3	24.7	49.0
	2015	629	34.9	4.8	21.9	34.5	34.9	1.8	2.1	31.0	39.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_10 (S051106): Earth Science / Applying Type: MC Key: D
Label: Amount of water and land on Earth

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	46.1	17.0	6.6	24.6	46.1	3.6	2.0	39.3	53.1
	2015	671	52.7	12.9	6.2	25.6	52.7	1.8	0.9	52.4	52.9
Korea, Rep. of	2011	619	69.1	1.6	6.2	22.2	69.1	0.6	0.4	64.7	73.2
	2015	661	81.2	0.1	3.2	15.1	81.2	0.2	0.2	75.2	86.3
Kuwait	2011	570	28.1	23.7	11.9	25.6	28.1	6.8	4.0	28.4	27.8
	2015	518	28.7	18.7	8.7	22.7	28.7	16.9	4.3	29.0	28.9
Lithuania	2011	667	57.0	9.4	6.8	23.2	57.0	1.9	1.7	52.8	60.8
	2015	638	61.5	6.6	7.2	20.7	61.5	2.1	2.0	63.6	59.3
Morocco	2011	868	24.2	38.9	15.3	20.8	24.2	0.0	0.8	26.2	22.4
	2015	660	27.9	34.8	12.6	20.6	27.9	3.9	0.2	26.8	29.0
Netherlands	2011	458	38.0	3.0	19.2	36.8	38.0	2.0	0.9	32.2	44.8
	2015	632	33.1	5.6	15.8	39.9	33.1	1.8	3.8	29.8	36.5
New Zealand	2011	795	34.5	19.4	10.3	30.4	34.5	4.4	1.0	31.7	37.1
	2015	901	37.0	14.8	10.9	30.0	37.0	5.2	2.1	36.9	37.1
Northern Ireland	2011	516	40.1	14.0	9.3	33.5	40.1	2.1	0.9	39.4	40.9
	2015	425	46.4	10.2	11.2	31.5	46.4	0.7	0.0	43.0	50.0
Oman	2011	1488	39.9	26.2	8.4	15.3	39.9	6.5	3.6	43.1	36.6
	2015	1293	49.6	15.8	9.7	17.7	49.6	5.3	1.8	50.5	48.7
Portugal	2011	579	42.5	11.1	7.3	32.6	42.5	4.1	2.4	44.8	40.4
	2015	674	39.7	11.5	8.9	27.2	39.7	5.0	7.7	35.9	43.1
Qatar	2011	595	40.8	18.2	10.5	22.7	40.8	6.2	1.4	43.9	38.2
	2015	740	39.1	18.1	9.7	23.2	39.1	5.7	4.1	38.6	39.6
Russian Federation	2011	632	49.2	12.5	5.7	30.4	49.2	1.7	0.4	43.9	54.3
	2015	693	46.2	9.7	9.3	30.5	46.2	2.8	1.6	43.7	48.6
Saudi Arabia	2011	663	52.0	17.1	10.5	17.3	52.0	1.5	1.6	54.7	49.1
	2015	597	41.5	15.4	7.7	10.6	41.5	20.7	4.1	43.2	39.6
Serbia	2011	631	44.0	7.6	6.5	33.6	44.0	6.8	1.5	40.8	47.0
	2015	576	40.2	13.5	7.1	24.2	40.2	7.3	7.7	40.0	40.4
Singapore	2011	906	44.2	7.4	19.7	27.4	44.2	1.3	0.0	39.9	48.8
	2015	927	45.1	6.5	18.6	27.2	45.1	2.0	0.5	40.1	49.8
Slovak Republic	2011	813	46.1	15.4	10.7	24.1	46.1	2.6	1.1	42.2	50.3
	2015	835	41.0	17.6	10.1	23.9	41.0	4.3	3.1	39.5	42.5
Slovenia	2011	648	40.0	11.7	11.4	28.0	40.0	6.9	1.9	41.0	39.3
	2015	627	47.7	10.4	7.9	27.5	47.7	3.7	2.8	42.6	52.7
Spain	2011	580	34.2	13.0	12.1	31.4	34.2	8.5	0.8	34.9	33.6
	2015	1105	33.6	10.3	12.6	33.1	33.6	6.5	3.9	33.5	33.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

S13_10 (S051106): Earth Science / Applying Type: MC Key: D
Label: Amount of water and land on Earth

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	50.7	4.9	11.6	26.5	50.7	4.8	1.5	47.0	53.7
	2015	594	61.7	4.3	9.6	14.7	61.7	4.6	5.2	57.1	66.5
Turkey	2011	1075	69.0	11.4	5.7	10.9	69.0	1.8	1.2	68.2	69.6
	2015	909	63.4	12.1	6.4	13.3	63.4	2.1	2.7	59.9	67.0
United Arab Emirates	2011	2080	42.2	18.4	7.7	22.0	42.2	7.2	2.5	41.6	42.9
	2015	3029	44.7	16.4	8.3	23.4	44.7	5.3	1.8	44.4	45.0
United States	2011	1813	51.4	8.8	6.4	29.2	51.4	2.1	2.0	46.1	57.3
	2015	1435	50.4	8.9	7.6	25.4	50.4	3.3	4.4	46.8	53.6

International Avg (n=40)	2011	30098	44.5	13.6	9.9	26.6	44.5	3.8	1.6	41.7	47.3
	2015	30591	45.0	12.0	10.0	25.2	45.0	4.6	3.3	41.9	48.0

Ontario, Canada	2011	639	39.1	10.7	9.6	34.9	39.1	2.4	3.3	31.7	45.7
	2015	638	36.1	11.6	8.5	32.4	36.1	4.0	7.5	27.8	43.3
Quebec, Canada	2011	600	36.8	11.6	8.9	37.3	36.8	4.4	0.9	33.9	39.9
	2015	400	30.9	10.3	13.9	33.0	30.9	6.7	5.3	25.2	36.4
Norway (4)	2011	450	46.4	8.2	10.3	27.0	46.4	5.7	2.5	39.5	53.4
	2015	608	41.0	8.2	4.8	32.5	41.0	5.0	8.6	36.4	44.9
Abu Dhabi, UAE	2011	582	34.5	22.4	9.3	24.4	34.5	7.3	2.0	34.2	34.8
	2015	721	35.0	20.4	9.6	26.2	35.0	6.5	2.3	36.7	33.4
Dubai, UAE	2011	881	49.3	14.2	7.0	21.1	49.3	6.1	2.3	45.8	52.4
	2015	1063	56.9	11.3	6.7	21.2	56.9	3.0	0.9	54.1	59.5
Florida, US	2011	366	51.6	8.6	8.1	28.9	51.6	1.9	1.0	45.4	57.9
	2015	299	44.0	9.5	6.8	33.6	44.0	3.3	2.8	41.3	46.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

SL3_11 (S051148): Earth Science / Knowing Type: MC Key: C
Label: What makes up solar system

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	881	56.4	26.7	3.4	56.4	11.0	0.8	1.6	54.3	58.4
	2015	869	55.2	23.3	2.6	55.2	12.4	2.1	4.4	53.1	56.9
Bahrain	2011	587	51.7	31.8	3.5	51.7	10.1	1.0	1.9	56.6	46.7
	2015	589	54.8	23.4	5.7	54.8	10.1	0.9	5.1	58.9	50.6
Belgium (Flemish)	2011	690	51.1	31.3	6.9	51.1	9.0	0.7	1.0	46.8	55.6
	2015	776	48.4	28.9	7.2	48.4	10.9	1.7	3.0	48.8	48.1
Chile	2011	800	70.1	12.4	5.1	70.1	6.5	0.7	5.2	70.7	69.4
	2015	683	61.8	18.5	4.5	61.8	6.0	1.5	7.6	61.8	61.8
Chinese Taipei	2011	605	61.9	22.5	4.1	61.9	10.3	0.9	0.3	57.6	65.8
	2015	611	64.5	18.3	2.5	64.5	13.4	0.4	0.9	58.3	70.9
Croatia	2011	664	65.5	22.4	3.1	65.5	6.4	1.1	1.5	62.2	69.1
	2015	575	67.8	19.4	2.7	67.8	6.5	0.6	3.0	64.7	70.7
Czech Republic	2011	659	61.3	20.9	3.6	61.3	11.0	0.6	2.6	58.4	64.0
	2015	739	68.8	17.7	2.8	68.8	5.1	1.5	4.2	69.5	68.2
Denmark	2011	573	55.5	27.4	5.2	55.5	7.9	1.1	2.9	56.3	54.6
	2015	525	65.7	13.9	4.3	65.7	7.8	0.8	7.4	60.8	70.7
England	2011	472	54.1	19.8	7.3	54.1	16.3	0.9	1.6	51.3	56.6
	2015	564	64.2	16.8	4.6	64.2	10.7	0.8	3.0	59.2	69.2
Finland	2011	660	77.2	10.8	3.0	77.2	7.6	0.5	1.0	77.3	77.0
	2015	718	70.5	12.9	5.1	70.5	6.5	2.0	3.0	70.7	70.3
Georgia	2011	667	56.1	18.5	9.4	56.1	11.1	1.2	3.7	55.1	57.0
	2015	568	55.1	17.5	8.4	55.1	9.8	2.3	6.9	57.5	52.9
Germany	2011	567	61.5	25.1	3.4	61.5	6.1	1.1	2.8	55.9	66.9
	2015	571	63.7	19.1	2.9	63.7	7.3	1.5	5.4	65.1	62.5
Hong Kong SAR	2011	566	69.4	16.4	3.1	69.4	10.5	0.5	0.0	66.4	71.9
	2015	531	74.5	12.8	1.6	74.5	8.8	1.3	0.9	69.2	78.7
Hungary	2011	737	68.8	11.5	6.5	68.8	8.3	1.4	3.4	71.0	66.8
	2015	720	71.9	9.4	4.0	71.9	7.2	1.0	6.5	69.7	73.7
Iran, Islamic Rep. of	2011	815	62.9	12.6	5.7	62.9	11.8	1.0	6.0	65.5	60.4
	2015	548	57.3	13.3	5.0	57.3	17.1	1.5	5.8	59.1	55.6
Ireland	2011	654	59.9	22.7	3.2	59.9	11.7	1.1	1.4	56.4	63.6
	2015	614	63.3	14.7	3.2	63.3	14.4	0.4	3.9	59.8	66.8
Italy	2011	604	59.0	28.9	3.5	59.0	4.7	1.9	2.0	57.4	60.6
	2015	621	56.4	26.9	3.5	56.4	6.5	2.2	4.5	55.9	57.0
Japan	2011	629	48.3	34.7	7.4	48.3	8.4	0.5	0.8	38.2	58.2
	2015	629	44.5	38.1	6.9	44.5	7.1	0.9	2.4	40.1	49.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SL3_11 (S051148): Earth Science / Knowing Type: MC Key: C
Label: What makes up solar system

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kazakhstan	2011	618	62.7	16.0	10.2	62.7	8.5	0.5	2.2	65.3	60.0
	2015	671	67.1	13.6	8.7	67.1	8.6	0.6	1.3	64.3	69.7
Korea, Rep. of	2011	619	61.0	24.8	3.5	61.0	10.1	0.0	0.6	59.2	62.8
	2015	661	72.4	14.9	2.4	72.4	10.0	0.2	0.2	67.2	76.8
Kuwait	2011	577	42.7	27.5	10.8	42.7	10.8	3.6	4.7	42.3	43.1
	2015	518	41.1	28.3	7.7	41.1	11.0	5.8	6.1	38.5	44.0
Lithuania	2011	667	61.9	22.9	5.6	61.9	7.4	0.4	1.7	58.0	65.4
	2015	638	60.7	23.3	5.5	60.7	7.1	0.8	2.5	60.9	60.5
Morocco	2011	918	34.2	36.4	16.8	34.2	11.4	0.5	0.8	31.8	36.6
	2015	671	37.2	39.7	12.2	37.2	9.4	1.3	0.2	38.5	35.8
Netherlands	2011	458	61.9	18.8	5.1	61.9	12.0	0.8	1.3	58.2	66.0
	2015	632	58.7	19.4	6.1	58.7	10.4	1.1	4.3	55.8	61.6
New Zealand	2011	795	53.0	24.3	4.2	53.0	16.0	1.3	1.2	53.6	52.5
	2015	901	55.8	19.7	4.7	55.8	16.1	1.3	2.3	52.0	59.9
Northern Ireland	2011	516	49.8	25.4	7.3	49.8	15.9	0.5	1.2	45.5	54.5
	2015	429	62.6	20.5	2.8	62.6	13.9	0.2	0.0	61.4	64.3
Oman	2011	1488	44.2	32.1	7.1	44.2	10.2	1.7	4.7	44.1	44.3
	2015	1289	49.7	30.9	5.9	49.7	9.2	1.7	2.6	52.0	47.5
Portugal	2011	579	72.4	13.2	3.5	72.4	7.3	0.8	2.7	72.8	72.1
	2015	674	76.0	9.0	1.5	76.0	4.2	0.8	8.4	76.6	75.4
Qatar	2011	595	47.9	31.3	8.6	47.9	7.9	2.1	2.2	50.0	46.1
	2015	740	49.0	30.2	7.0	49.0	6.3	2.4	5.0	48.9	49.1
Russian Federation	2011	632	80.7	9.4	3.7	80.7	4.6	1.1	0.4	85.1	76.5
	2015	693	81.0	7.3	5.0	81.0	3.8	1.1	1.9	80.6	81.4
Saudi Arabia	2011	662	53.7	29.0	4.9	53.7	8.9	1.4	2.2	59.5	47.3
	2015	598	43.2	30.9	6.6	43.2	11.5	1.6	6.2	45.6	40.5
Serbia	2011	631	52.0	31.3	3.9	52.0	9.0	1.7	2.1	49.5	54.3
	2015	576	48.2	24.3	5.4	48.2	10.5	1.0	10.5	46.5	49.9
Singapore	2011	906	50.3	30.9	3.9	50.3	14.4	0.4	0.0	45.7	55.3
	2015	927	51.5	28.2	3.4	51.5	15.8	0.5	0.7	45.3	57.3
Slovak Republic	2011	813	80.2	10.7	1.9	80.2	5.2	0.6	1.4	80.4	79.9
	2015	835	71.7	15.2	2.8	71.7	5.4	0.7	4.3	73.9	69.6
Slovenia	2011	648	28.9	53.0	3.3	28.9	8.3	1.0	5.4	25.6	31.6
	2015	627	33.7	52.9	3.6	33.7	4.8	1.2	3.9	27.6	39.8
Spain	2011	580	56.4	25.7	5.4	56.4	8.9	0.8	2.8	56.0	56.8
	2015	1105	66.0	18.4	2.4	66.0	6.5	1.1	5.7	63.2	68.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent.

SI3_11 (S051148): Earth Science / Knowing Type: MC Key: C
Label: What makes up solar system

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2011	654	69.0	18.3	3.2	69.0	6.7	0.9	1.9	66.9	70.8
	2015	594	68.7	15.7	2.0	68.7	5.0	2.7	5.9	63.5	74.3
Turkey	2011	1075	33.4	35.7	8.7	33.4	19.4	1.3	1.4	29.2	36.9
	2015	909	34.1	37.9	7.8	34.1	16.3	0.7	3.2	29.2	39.2
United Arab Emirates	2011	2080	55.3	24.3	4.9	55.3	9.0	1.3	5.1	57.5	53.1
	2015	3029	57.4	23.3	5.1	57.4	8.6	3.0	2.7	56.9	57.8
United States	2011	1813	68.5	15.9	2.6	68.5	9.7	0.5	2.8	66.2	71.0
	2015	1435	68.6	13.0	2.6	68.6	9.3	1.4	5.2	65.7	71.2

International Avg (n=40)	2011	30154	57.8	23.8	5.4	57.8	9.8	1.0	2.2	56.5	59.0
	2015	30603	59.1	21.5	4.7	59.1	9.3	1.4	4.0	57.4	60.7

Ontario, Canada	2011	639	50.9	27.5	4.1	50.9	12.7	1.0	3.8	41.8	58.9
	2015	640	54.4	22.0	2.9	54.4	11.7	0.7	8.4	52.7	56.0
Quebec, Canada	2011	600	58.0	27.3	3.6	58.0	9.4	0.7	0.9	56.7	59.4
	2015	399	58.5	18.9	3.7	58.5	10.1	1.3	7.6	60.7	56.3
Norway (4)	2011	450	57.7	18.1	8.0	57.7	12.3	0.7	3.1	58.1	57.3
	2015	608	57.0	15.2	6.1	57.0	8.7	1.6	11.4	51.9	61.3
Abu Dhabi, UAE	2011	582	54.3	24.7	5.6	54.3	8.9	1.1	5.4	55.0	53.5
	2015	721	47.5	29.2	6.9	47.5	9.4	3.6	3.3	50.1	45.2
Dubai, UAE	2011	881	61.8	20.5	3.1	61.8	8.4	1.9	4.2	64.0	60.0
	2015	1063	68.8	15.6	3.6	68.8	8.5	2.3	1.2	67.7	69.9
Florida, US	2011	366	74.1	10.0	2.7	74.1	10.8	0.0	2.4	69.4	78.9
	2015	299	68.6	14.2	3.4	68.6	8.5	2.2	3.1	70.7	67.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.