

Appendix 10F: Derived Items in TIMSS 2019

Grade 4 Mathematics

M01_01 – ME51043: Item parts A, B, C, D, E, F, G, and H are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M01_05 – ME51508: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct

M02_03 - ME71167: Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M02_05 – ME71162, MP71162: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct

M02_06 - ME71078: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M02_08 - ME71151, MP71151: Item parts A, B, and C are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 2 parts are correct

M02_11 – ME71142: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct

M02_12 – ME71204, MP71024: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M04_03 – ME71036, MP71036: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct

M04_09 - ME71178, MP71178: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M04_12 – ME71175, MP71175: Item parts A, B, and C are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 1 or 2 are correct

M06_01 – ME61018, MP61018: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M06_10 – ME61266: Item parts A, B, C, D, E, and F are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 5 parts are correct

M08_11 – ME71141, M08_10 – MP71141: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M08_12 – ME71194: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct

M08_13 – ME71193, M08_12 – MP71193: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both are correct and 1 score point is awarded if 1 part is correct

M10_05 – ME71213: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M10_08 – ME71179, MP71179: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M10_12A - ME71187A: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct





Grade 4 Mathematics (continued)

M11_08 - ME61095: Item parts B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)

M12_04A – ME71216A, MP71216A: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct

M12_05 – ME71117: Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M12_10 - ME71202: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M13_01 – ME61240, MP61240: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M13_02 – ME61254: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M14_11A – ME71138A, MP71128A: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M14_13 – ME71205, MP71205: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

Items beginning with "ME" are eTIMSS items. Items beginning with "MP" are paperTIMSS items, or bridge items. paperTIMSS trend items deleted or recoded for all countries were also derived for eTIMSS bridge samples.

Grade 4 Mathematics - Less Difficult

MN04_14 - MN21003: Item parts A, B, C, and D are combined to create a 2-point item, where 2 score points are awarded if all parts correct and 1 score point is awarded if 3 parts are correct

MN14_10 - MN21057: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

MP02_05 – MP71162: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct

MP02_08 – MP71151: Item parts A, B, and C are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 2 parts are correct

MP02_12 – MP71024: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

MP08_10 – MP71141: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

MP08_12 – MP71193: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both are correct and 1 score point is awarded if 1 part is correct

MP13_01 – MP61240: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

Items beginning with "MP" are items shared with the regular fourth grade mathematics assessment. Items beginning with "MN" are items unique to less difficult mathematics.





Grade 4 Science

- **S02_03 SE71017, SP71017:** Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S04_02 SE71902, SP71902:** Item parts B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **S04_04 SE71041, SP71041:** Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct
- **S04_05 SE71046, SP71046:** Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S05_10 SE51151:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S06_06 SE61083, SP61083:** Item parts B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **S06_09A SE61142A, SP61142A:** Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S07_03 SE51138Z, SP51138Z:** Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct (part C was deleted)
- **S09_08 SE61160:** Item parts B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **\$10_01 \$E71009**, **\$P71009**: Item parts A, B, C, D, E, and F are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 4 or 5 parts are correct
- **S10_09 SE71106, SP71006:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S10_13 SE71254:** Item parts A, B, C, D, E, F, G, and H are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S13_11 SE61124, SP61124:** Item parts B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **S13_12 SE61116, SP61116:** Item parts B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **S14_01 SE71063:** Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S14_08 SE71114:** Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

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Grade 8 Mathematics

- M02_01 ME72007, MP72007: Item parts A, B, C, D, and E are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 4 parts are correct
- M02_11 ME72180: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M02_12 ME72198, MP72198: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct
- M02_14 ME72170: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M03_10 ME62244: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct
- **M04_01 ME72178:** Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M04_03 ME72020: Item parts A, B, C, and D are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 3 parts are correct
- **M04_05 ME72052, MP72052:** Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct
- M04_11 ME72164, MP72164: Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M05_12 ME52502: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **M06_10 ME62288:** Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct
- M07_08 ME52087: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct
- M08_04 ME72055: Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M09_06 ME62317: Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M09_12A ME62345A: Item parts A, B, C, and D are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 2 or 3 parts are correct
- M10_09 ME72095, MP72095: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct,
- M10_14 ME72232, MP72232: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- M11_03 ME62215: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both are correct and 1 score point is awarded if 1 part is correct
- M12_08 ME72225, MP72225: Item parts A and B are combined to create a 1-point item, where 1 score point is awarded if both parts are correct
- M13_09 ME62170: Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both parts are correct and 1 score point is awarded if 1 part is correct





Grade 8 Mathematics (continued)

M14_09 - ME72081: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

M14_10 – ME72140, MP72140: Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct

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Grade 8 Science

- **S01_05 SE52095Z, SP52095Z:** Item parts B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part A is an example)
- **S02_08 SE72130, SP72130:** Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S02_11 SE72232, SP72232:** Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- S04_02 SE72403: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S04_13 SE72345, SP72345:** Item parts A, B, C, D, E, F, and G are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 5 or 6 parts are correct
- **S06_13A SE62173A, SP62173A:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S07_05 SE52015Z, SP52015Z:** Item parts A, B, C, D, E, and F are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- S08_02 SE72400: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S08_13 SE72260:** Item parts A, B, C, D, E, F, and G are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- S08_14 SE72265, SP72265: Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S09_08 SE62018, SP62018:** Item parts A, B, C, D, and E are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 4 parts are correct
- **S10_01 SE72033:** Item parts A, B, C, D, and E are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 4 parts are correct
- **S10_05 SE72086:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S10_13 SE72261, SP72261:** Item parts A, B, C, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S11_06 SE62006:** Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S11_15 SE62242, SP62242:** Item parts A, B, D, and E are combined to create a 1-point item, where 1 score point is awarded if all parts are correct (part C was deleted)





Grade 8 Science (continued)

- **S12_03 SE72000:** Item parts A, B, C, D, and E are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 4 parts are correct
- **S12_08 SE72143:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S13_04 SE62101:** Item parts A, B, C, and D are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 2 or 3 parts are correct
- **S13_07 SE62047, SP62047:** Item parts A, B, and C are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S13_08 SE62042:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S13_14 SE62022, SP62022:** Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S13_15 SE62243:** Item parts A, B, C, and D are combined to create a 2-point item, where 2 score points are awarded if all parts are correct and 1 score point is awarded if 2 or 3 parts are correct
- S14_02 SE72905: Item parts A, B, C, and D are combined to create a 1-point item, where 1 score point is awarded if all parts are correct
- **S14_04 SE72016, SP72016:** Item parts A and B are combined to create a 2-point item, where 2 score points are awarded if both are correct and 1 score point is awarded if 1 part is correct

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