

Math Spring 2021

Grade 4

Alignment Document and Answer Key

Table 1: Grade 4: 2021 Released Items

| Sequence | UIN | Evidence Statement | Sub-Claim | Task Type | Points | Calculator | Functionality | 2021 Online 1 Form |
|----------|-------------|--------------------|-----------|-----------|--------|------------|---------------|-------------------------------------|
| 1 | M400309 | 4.MD.3 | B | 1.1 | 1 | N | FIB | <input checked="" type="checkbox"/> |
| 2 | M400569 | 4.OA.5 | B | 1.1 | 1 | N | FIB | <input checked="" type="checkbox"/> |
| 3 | VF490086 | 4.NBT.6-2 | A | 1.1 | 1 | N | FIB | <input checked="" type="checkbox"/> |
| 4 | M400665 | 4.OA.3-2 | A | 1.2 | 2 | N | MC | <input checked="" type="checkbox"/> |
| 5 | VF497997 | 4.G.3 | B | 1.1 | 1 | N | MC | <input checked="" type="checkbox"/> |
| 6 | 4223-M04140 | 4.C.5-6 | C | 2.4 | 4 | N | CR | <input checked="" type="checkbox"/> |
| 7 | M00927 | 4.MD.5 | B | 1.1 | 1 | N | MS | <input checked="" type="checkbox"/> |
| 8 | M400595 | 4.NF.4b-2 | A | 1.1 | 1 | N | MC | <input checked="" type="checkbox"/> |
| 9 | M400250 | 4.C.4-5 | C | 2.3 | 3 | N | CR | <input checked="" type="checkbox"/> |
| 10 | M400260P | 4.MD.1 | B | 1.1 | 1 | N | MS | <input checked="" type="checkbox"/> |
| 11 | M400552 | 4.Int.2 | A | 1.1 | 1 | N | FIB | <input checked="" type="checkbox"/> |
| 12 | M400620 | 4.G.1 | B | 1.1 | 1 | N | MS | <input checked="" type="checkbox"/> |

Sequence: The item order number as it appears in the released item set and answer key

UIN: A unique item number used to identify the item in the internal item bank

Evidence Statements: The evidence statement to which the item is aligned

Sub-Claims: The Sub-Claim to which the item is aligned

Task Type: Type I, II, or III. See the Informational Guides for more information

Functionality: MC – multiple choice; MS – multiple-select; FIB – fill-in-the-blank; CR – constructed response

Table 2: Grade 4 Released Item List with Answer Key

| Sequence | UIN | Evidence Statement | Points | Answer Key |
|-----------------|-------------|---------------------------|---------------|--|
| 1 | M400309 | 4.MD.3 | 1 | 110 |
| 2 | M400569 | 4.OA.5 | 1 | 36 |
| 3 | VF490086 | 4.NBT.6-2 | 1 | 8 |
| 4 | M400665 | 4.OA.3-2 | 2 | A, D |
| 5 | VF497997 | 4.G.3 | 1 | C |
| 6 | 4223-M04140 | 4.C.5-6 | 4 | Part A: See Rubric Part B: See Rubric |
| 7 | M00927 | 4.MD.5 | 1 | A, D, F |
| 8 | M400595 | 4.NF.4b-2 | 1 | D |
| 9 | M400250 | 4.C.4-5 | 3 | See Rubric |
| 10 | M400260P | 4.MD.1 | 1 | B, E |
| 11 | M400552 | 4.Int.2 | 1 | 672 |
| 12 | M400620 | 4.G.1 | 1 | C, E |

Item #6 4223-M04140 Rubric - Part A

| Score | Description |
|--------------|---|
| 2 | <p>Student response includes each of the following 2 elements:</p> <ul style="list-style-type: none">• Valid explanation of why Statement 1 is incorrect• Correct comparison of the area of Figure Y and Figure Z <p>Sample Student Response:</p> <p>"The student is incorrect because models can have equal areas, even if their lengths and widths are different.</p> <p>The total area of Figure Y is equal to the total area of Figure Z.</p> <p>Each square in Figure Y is equal to one square unit. Since there is 1 row of 8 squares, the area of Figure Y is equal to $1 \times 8 = 8$ square units.</p> <p>Each square in Figure Z is equal to one square unit. Since there are 2 rows with 4 squares in each row, the area of Figure Z is equal to $2 \times 4 = 8$ square units."</p> <p>Or other valid response.</p> |
| 1 | <p>Student response includes 1 of the above elements.</p> |
| 0 | <p>The response is incorrect or irrelevant.</p> |

Item #6 4223-M04140 Rubric - Part B

| Score | Description |
|--------------|---|
| 2 | <p>Student response includes each of the following two elements:</p> <ul style="list-style-type: none">• Valid explanation of why Statement 2 is incorrect• Correct area of Figure X: 20 square units <p>Sample Student Response:</p> <p>“The student is incorrect because the student confused area and perimeter.</p> <p>The area of a rectangle can be found by counting columns and rows. To find the total area of the rectangle, you must add the amount of unit squares in each row: $5 + 5 + 5 + 5 = 20$ square units.</p> <p>Or since there are 4 rows with 5 squares in each row, the area of Figure X is equal to $4 \times 5 = 20$ square units.</p> <p>The total area of Figure X is 20 square units.”</p> <p>Or other valid response.</p> |
| 1 | Student response includes 1 of the above elements. |
| 0 | The response is incorrect or irrelevant. |

Item #9 M400250 Rubric

| Score | Description |
|-----------------|--|
| <p>3</p> | <p>Student response includes each of the following 3 elements:</p> <p>Reasoning</p> <ul style="list-style-type: none"> Valid equation, using fractions, to show sum of values of Grid M and Grid R: $\frac{7}{10} + \frac{17}{100} = \frac{87}{100}$ or equivalent <p>Computation</p> <ul style="list-style-type: none"> Correct decimal value of Grid M: 0.7 or equivalent <p>Reasoning</p> <ul style="list-style-type: none"> Valid explanation for how to compare the decimal values for Grid M and Grid R using the comparison 0.7 > 0.17 <p>Student Sample Response:</p> <p>The equation is $\frac{7}{10} + \frac{17}{100} = \frac{87}{100}$.</p> <p>The decimal value of Grid M is $\frac{7}{10} = 0.7$</p> <p>Because 0.7 is the same as 0.70, or $\frac{7}{10} = \frac{70}{100}$, I know that 0.70 is greater than 0.17. The value in Grid M is greater than the value in Grid R. We can see there is more shading in Grid M.</p> <p>0.7 > 0.17</p> <p>Or other valid response.</p> |
| <p>2</p> | <p>Student response includes 2 of the above elements.</p> |
| <p>1</p> | <p>Student response includes 1 of the above elements.</p> |
| <p>0</p> | <p>The response is incorrect or irrelevant.</p> |