Grade 2 Mathematics Instructional Materials Scoring Rubric

Introduction:

The following Instructional Materials Scoring Rubric for Mathematics is designed to score materials in the following categories:

- Instructional Focus
- Math Practices
- Aspects of Rigor
- Accessibility Features

Scoring:

Each section is to be scored using a 0, 1, or 2. For all sections, except for Rigor, use the following rubric when deciding on the appropriate rating:

- 0: The metric is not present within the material.
- 1: The metric is present within the material. The intent and/or frequency component of the metric is not fully met.
- 2: A rating of 2 indicates the metric is present and all aspects of the metric are fully met.

For Rigor:

- 0: The standard is not instructionally present within the material.
- 1: The standard is instructionally present but does not have an instructional focus on the indicated type of rigor.
- 2: The standard is instructionally present and has a clear instructional focus on the indicated type of rigor.

Note: Some standards appear under multiple aspects of rigor (i.e., Conceptual Understanding, Procedural Fluency, or Application). When scoring these standards, only score the part of the standard relevant to that aspect of rigor, which is identified by a bold, italics, larger font.

Gateway: The publisher must provide a Tennessee standards alignment guide as a part of the scope and sequence for the material. If this gateway is not met, the materials will not be scored.

Instructional Focus				
	0	**1**	**2**	**Evidence**
Connections to content from prior grades are clearly identified and explicitly related to grade-level work.				
Materials embed a minimum of 3 tasks in every unit. Each task has multiple entry-points and can be solved using a minimum of 2 solution strategies and/or representations.				
Materials give students opportunities to work problems within each lesson. Each problem set: • Covers the full breadth of the standard(s) covered in the lesson • Is aligned to on grade level expectations as identified in the standard(s)				
Teacher resources indicate common student misconceptions in every unit and provide guidance on how to instructionally address the identified misconceptions.				
Materials provide educative supports (e.g., adult level explanations of the standards and strategies) in every lesson for teachers to ensure standards are taught accurately and to the appropriate level of rigor (i.e., conceptual understanding, procedural fluency, and application) as indicated by the standards.				
Materials develop student understanding of multiple representations (i.e., concrete, representational, abstract) for relevant standards which are identified in the state's Instructional Focus Documents.				
Materials include problems and activities in every unit that connect two or more grade level standards in a domain (e.g., 2.MD.A.1 and 2.MD.A.2).				
Materials include problems and activities in every unit that connect two or more grade level domains. (e.g., 2.MD.B.6 and 2.OA.A.1)				
Materials provide opportunities for students to participate in a spiraled review in every unit.				
			Total	

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Mathematical Practices

Math Practices/Literacy Skills for Math Proficiency	0	1	2	Evidence
Materials embed the eight math practice standards in every unit.				
Math practice standards are clearly identified in both teacher and student materials.				
Materials use appropriate math vocabulary which is aligned to the grade level standards.				
Materials support students in discussing and articulating mathematical ideas. Within each lesson students either write or verbally justify their thoughts.				
			Total	

Accessibility Features

Digital Materials	0	1	2	Evidence
All lessons within the materials are available in digital form and include a printable option.				
In every lesson, materials include recommended supports, accommodations, and modifications for Students with Disabilities and English Language Learners that will support their regular and active participation in accessing on grade level material (e.g., modifying vocabulary words within word problems, sentence starters, etc.).				
			Total	

Aspects of Rigor

Conceptual Understanding: The materials support the intentional development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content standards or clusters.	0	1	2	Evidence
2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members by pairing objects or counting them by 2s. Write an equation to express an even number as a sum of two equal addends.				

2.OA.C.4 Use repeated addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.				
2.OA.D.5 Identify arithmetic patterns in addition or hundreds chart and explain them using properties of operations.				
2.NBT.A.1 Know that the three digits of a three-digit number represent amounts of hundreds, tens, and ones				
2.NBT.A.2 Recognize, describe, extend, and create patterns when counting by ones, twos, fives, tens, and hundreds and use those patterns to predict the next number in the counting sequence up to 1000 through counting.				
2.NBT.A.3 Read and write numbers to 1000 using standard form, word form, and expanded form.				
2.NBT.A.4 Compare two three-digit numbers based on the meanings of the digits in each place and use the symbols >, =, and < to show the relationship.				
2.NBT.B.6 Add up to four two-digit numbers using properties of operations and strategies based on place value.				
2.NBT.B.7 Add and subtract within 1000 using concrete models, drawings, strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to explain the reasoning used.				
2.NBT.B.8 Mentally add or 3+1+subtract 10 or 100 to/from any given number within 1000.				
2.MD.A.2 Measure the length of an object using two different whole number units of measure and ***describe how the two measurements relate to the size of the unit chosen***.				
2.MD.A.3 Estimate lengths using whole number units of inches, feet, yards, centimeters, and meters.				
2.MD.B.6 Represent whole numbers as lengths from 0 on a number line and know that the points corresponding to the numbers on the number line are equally spaced. Use a number line to represent whole number sums and differences of lengths within 100.				
2.G.A.3 Partition circles and rectangles into two, three, and four equal shares. Describe the shares using the words halves, thirds, fourths, half of, a third of, and a fourth of, and describe the whole as two halves, three thirds, four fourths. ***Recognize that equal shares of identical wholes need not have the same shape***.				

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Procedural Skill and Fluency: The materials provide intentional opportunities for students to develop procedural skills and fluencies, especially where called for in specific content standards or clusters	0	1	2	Evidence
2.OA.B.2 Fluently add and subtract within 30 using mental strategies. By the end of 2nd grade, know all sums of two one-digit numbers and related subtraction facts.				
2.NBT.B.5 Fluently add and subtract within 100 using properties of operations, strategies based on place value, and/or the relationship between addition and subtraction.				
2.MD.A.1 Measure the length of an object in whole number units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.				
2.MD.A.2 *Measure the length of an object using two different whole number units of measure* and describe how the two measurements relate to the size of the unit chosen.				
2.MD.A.4 Measure, using whole number lengths, to determine how much longer one object is than another and express the difference in terms of a standard unit of length.				
2.MD.C.7 Tell and write time in quarter hours and to the nearest five minutes (in a.m. and p.m.) using analog and digital clocks.				
2.MD.D.9 Given a set of data, create a line plot, where the horizontal scale is marked off in whole-number units.				
2.MD.D.10 *Draw a pictograph (with a key of values of 1, 2, 5, or 10) and a bar graph (with intervals of one) to represent a data set with up to four categories.* Solve addition and subtraction problems related to the data in a graph.				
2.G.A.1 Identify triangles, quadrilaterals, pentagons, and hexagons. Draw two-dimensional shapes having specified attributes (as determined directly or visually, not by measuring), such as a given number of angles/vertices or a given number of sides of equal length.				
2.G.A.2 Partition a rectangle into rows and columns of same-sized squares and find the total number of squares.				
2.G.A.3 *Partition circles and rectangles into two, three, and four equal shares. Describe the shares using the words halves, thirds, fourths, half of, a third of, and a fourth of, and describe the whole as two halves, three thirds, four fourths.* Recognize that equal shares of identical wholes need not have the same shape.				

Applications: The materials support the intentional development of students' ability to utilize mathematical concepts and skills in engaging applications, especially where called for in specific content standards or clusters.	0	1	2	Evidence
2.OA.A.1 Add and subtract within 100 to solve one- and two-step contextual problems, with unknowns in all positions, involving situations of *add to*, *take from*, *put together/take apart*, and *compare*. Use objects, drawings, and equations with a symbol for the unknown number to represent the problem.				
2.MD.B.5 Add and subtract within 100 to solve contextual problems, with the unknown in any position, involving lengths that are given in the same units by using drawings and equations with a symbol for the unknown to represent the problem.				
2.MD.C.8 Solve contextual problems involving amounts less than one dollar including quarters, dimes, nickels, and pennies using the ¢ symbol appropriately. Solve contextual problems involving whole number dollar amounts up to $100 using the $ symbol appropriately.				
2.MD.D.10 Draw a pictograph (with a key of values of 1, 2, 5, or 10) and a bar graph (with intervals of one) to represent a data set with up to four categories. ***Solve addition and subtraction problems related to the data in a graph.***				
			Total	