EARLY MATH ALTERNATE ASSESSMENT

GRADE 2

Acadience Math Alternate Assessment

Utah State Board of Education

This document is in DRAFT form.

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Early Math Alternate Assessment (EMAA) Rubrics – 2nd Grade

The Early Math Alternate Assessment (EMAA) is the alternate assessment to Acadience Math for students with Significant Cognitive Disabilities (SCD) in grades 1, 2 or 3.

The EMAA is a simple rubric that assesses students' early numeracy skills as they relate to skills within Mathematics strands that are aligned to the skills assessed with Acadience Math (operations and algebraic thinking, number and operations in base ten, measurement and data and geometry). The rubric is meant to be completed for each student with a SCD (grades 1-3) by their teacher, based on the student's performance on IEP goals and every day early math instruction within the classroom.

How to Score

For a student to score at a performance level for beginning, middle or end of year, they must be able to do each skill listed (except in the 'Not Yet Emerging' level) to a level of mastery as determined by the teacher (80% correct, or 80% independence is a general guideline for mastery). As performance levels are determined for each strand, the points should then be transferred to the Score Sheet.
After they are added up, the student's reportable score will then be determined by the Scoring Guide. For beginning of year, the reportable score is dependent on points, whereas in middle and end of year, the students' reportable score is determined by progress compared to beginning of year or in scoring 'At Target' or 'Advanced' for a specified number of strands.
Examples of sources of data used to complete the EMAA include:

- Anecdotal notes
- Work samples
- Photographs
- Videos
- Performance data

There will be a great amount of variety in how each indicator is assessed for each individual student. Consideration should be made for each student about whether assistive technology is required for a student to learn or demonstrate a skill. For example, a student could identify groups of objects by selecting a message on a single message output device or they could select their answer by pointing.

Each indicator should be assessed in **the same way and given the same supports for all three windows (BOY, MOY and EOY).**

Student Name: BOY Date: MOY Date: EOY Date:

Operations and Algebraic Thinking (2.OA) - Represent Addition

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Add and subtract within 20 (Standard 2.OA.2) (Computation)	EE.2.NBT.6-7. Use objects, representations, and numbers (0–20) to add.	☐ Student is not demonstrating skills at an emergent level	☐ Student can understand that the "+" sign means putting groups of objects together to make a larger group ☐ Student can represent addition by putting 2 groups of objects together (1-5 objects or representations) to make one group that is more than the original groups and name/convey the sum	☐ Student can solve addition problems (sums within 0-10) with objects, representations, and numbers *Example: 2+7=?, 3+4=?, etc.*	☐ Student can solve addition problems (sums within 0-20) with objects, representations, and numbers *Example: 5+7=? , 12+5=?, etc.*	☐ Student can fluently solve addition problems for sums within 0-10 using mental math strategies

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Operations and Algebraic Thinking (2.OA) - Represent Subtraction

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Add and subtract within 20 (Standard 2.OA.2) (Computation)	EE.2.NBT.6-7. Use objects, representations, and numbers (0–20) to subtract.	☐ Student is not demonstrating skills at an emergent level	☐ Student can explain/convey that the "-" sign means taking away or finding the difference between the number of objects in two groups ☐ Student can represent subtraction by separating a larger whole into smaller parts or by taking objects away from the larger group and name/convey the difference	☐ Student can solve subtraction problems (differences within 0-10) with objects, representations, and numbers *Example: 7 - 2=?, 4 - 3=?, etc.*	☐ Student can solve subtraction problems (differences within 0-20) with objects, representations, and numbers *Example: 12 - 5 =? , 14 - 6=?, etc.*	☐ Student can fluently solve subtraction problems for differences within 0-10 using mental math strategies

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Operations and Algebraic Thinking (2.OA) - Equal Groups

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Work with equal groups of objects to gain foundations for multiplication (Standards 2.OA.3–4) (Concepts and Applications)	EE.2.OA.3. Equally distribute even numbers of objects between two groups.	☐ Student is not demonstrating skills at an emergent level	☐ When presented with two groups of objects (10 or fewer) student can identify if they are the same (equal)	☐ When presented with a group of objects (up to 10) the student can distribute the objects into two equal sets when the number is even	When given a set of objects (up to 10), the student can distribute the objects into two equal or almost equal sets: ☐ Identify if the groups are equal when the number is even ☐ Identify that the sets are not equal when the number is odd ☐ Acknowledge when the two groups are equal or not	☐ When given a set of objects, the student can distribute the objects into two equal or almost equal sets and explain/convey the number sentence/equation represented by the two groups of objects *Example: Two groups of two objects can be represented by 2+2=4*

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Number and Operations in Base Ten (2.NBT) - Place Value Understanding

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Understand place value (Standards 2.NBT.1–4) (Concepts and Applications)	EE.2.NBT.1. Represent numbers up to 30 with sets of tens and ones using objects in columns or arrays.	☐ Student is not demonstrating skills at an emergent level	☐ Student can create a set of 10 using a ten frame.	☐ Student can arrange objects (1-19) to represent place value by making sets of tens and ones using ten frames, place value charts, or base ten blocks.	☐ When presented with a number (1-30), student can arrange objects to represent the place value of that number by making sets of tens and ones using ten frames, place value charts, or base ten blocks.	☐ When presented with a number (30-99), student can represent the place value of that number by drawing, writing, or using objects.

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Measurement and Data (2.MD) - Non-Standard Units of Measurement

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Measure and estimate lengths in standard units (Standards 2.MD.1–4) (Concepts and Applications)	EE.2.MD.1. Measure the length of objects using non-standard units	☐ Student is not demonstrating skills at an emergent level	☐ Student can determine if the length of an object is longer or shorter than another object	☐ Student can align non-standard units (ex. Paperclips, colored tiles) end-to-end to measure an object	☐ Students can use non-standard units to measure an object and identify the length of the object in non-standard units. *Example: How many paperclips long is the object?*	☐ Student can measure an object and identify the length of that object in standard units (1-5 inches)

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Geometry (2.G) - Shape Identification

Gen ed Standard	Essential Element	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Utah Core Standard) 5 points
Reason with shapes and their attributes (Standards 2.G.1–3) (Concepts and Applications)	EE.2.G.1. Identify common two-dimensional shapes: square, circle, triangle, and rectangle.	☐ Student is not demonstrating skills at an emergent level	Student can identify 2 of the 4 shapes: ☐ Square ☐ Circle ☐ Triangle ☐ rectangle	Student can identify 3 of the 4 shapes: ☐ Square ☐ Circle ☐ Triangle ☐ rectangle	Student can identify: ☐ Square ☐ Circle ☐ Triangle ☐ rectangle	Student can identify these shapes by their attributes: ☐ Square ☐ Circle ☐ Triangle ☐ rectangle *Example: Which shape has 4 equal sides?*

NOTES:

Student Name: BOY Date: MOY Date: EOY Date:

Scoring Sheet

Strands	Beginning of Year (BOY)	Middle of Year (MOY)	End of Year (EOY)
Operations and Algebraic Thinking - Represent Addition	/5	/5	/5
Operations and Algebraic Thinking - Represent Subtraction	/5	/5	/5
Operations and Algebraic Thinking - Equal Groups	/5	/5	/5
Number and Operations in Base Ten - Place Value Understanding	/5	/5	/5
Measurement and Data - Non-Standard Units of Measurement	/5	/5	/5
Geometry - Shape Identification	/5	/5	/5
Total Points	/30 Date:	/30 Date:	/30 Date:

Scoring Guide

Beginning of Year (BOY)

Initial Performance	Score
6 Points	Alternate No
7 to 12 Points	Alternate No
13 to 18 Points	Alternate Yes
19 to 24 Points	Alternate Yes
25 to 30 Points	Alternate Yes

★ If student is scoring 25-30 or in 5 out 6 strands at target or above, IEP team should consider if the student can access the regular Acadience Math Benchmark assessment.

Student Name: BOY Date: MOY Date: EOY Date:

Middle of Year (MOY)

Initial Points Score:

Growth	Progress	Score
Student scored **0 to 1** point more than BOY	Well-Below Typical Progress	Alternate No
Student scored **2 to 3** points more than BOY	Below Typical Progress	Alternate No
Student scored **4 to 5** points more than BOY or Reached **Approaching Target** for 5/6 strands	Typical Progress	Alternate Yes
Student scored **6 to 7** points more than BOY or Reached **At Target** for 5/6 strands	Above Typical Progress	Alternate Yes
Student scored **8 or more** than BOY or Reached **Advanced** for 5/6 strands	Well-Above Typical Progress	Alternate Yes

★ If student is scoring 25-30 or in 5 out 6 strands at target or above, IEP team should consider if the student can access the regular Acadience Math Benchmark assessment.

Student Name: BOY Date: MOY Date: EOY Date:

Scoring Guide End of Year (EOY)

Initial Points Score:

Growth	Progress	Score
Student scored **0 to 2** points more than BOY	Well-Below Typical Progress	Alternate No
Student scored **3 to 4** points more than BOY	Below Typical Progress	Alternate No
Student scored **5 to 6** points more than BOY or Reached **At Target** for 5/6 strands	Typical Progress	Alternate Yes
Student scored **7 to 8** points more than BOY Or Reached **At Target** for all strands	Above Typical Progress	Alternate Yes
Student scored **9 or more** points more than BOY or Reached **Advanced** for 5/6 strands	Well-Above Typical Progress	Alternate Yes

★ If student is scoring 25-30 or in 5 out 6 strands at target or above, IEP team should consider if the student can access the regular Acadience Math Benchmark assessment.