# EARLY MATH ALTERNATE ASSESSMENT

# GRADE 3

Acadience Reading Alternate Assessment

Utah State Board of Education

This document is in DRAFT form

ADA Accessible 8/15/2022

# Early Math Alternate Assessment (EMAA) Rubrics – 3rd 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 (3.OA) - Repeated 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 |
|---|---|---|---|---|---|---|
| Represent and solve problems involving multiplication and division within 100 (Standards 3.OA.1–4 and Standard 3.OA.7) (Computation, Concepts and Applications) | EE.3.OA.1-2. Use repeated addition to find the total number of objects and determine the sum. | ☐ Student is not demonstrating skills at an emergent level | ☐ When presented with two groups of objects and asked to add to find the sum, student can find the sum by counting both groups of objects. | ☐ When presented with three or more equal groups of objects and asked to add to find the sum, student can find the sum by counting all the objects. | ☐ When presented with three or more equal groups of objects, student can create a repeated addition equation to find the sum.<br><br>*Examples:*<br>*2 +2 +2 = 6*<br>*4+4+4+4 = 16* | ☐ When presented with three or more equal groups of objects, student can relate the repeated addition sentence to the related multiplication equation.<br><br>*Example:*<br>*2+2+2=6*<br>*3x2=6* |

NOTES:

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

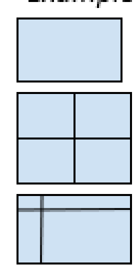
## Number and Operations in Base Ten (3.NBT) - Place Value Understanding

| 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 |
|---|---|---|---|---|---|---|
| Use place value understanding and properties of operations to perform multi-digit arithmetic. A range of algorithms may be used (Standards 3.NBT.1–3) (Computation Concepts and Applications) | EE.3.NBT.2. Demonstrate understanding of place value to tens.<br><br>Big Idea: The value of a digit depends on its place, or position, in the number. | ☐ Student is not demonstrating skills at an emergent level | ☐ When presented with more than ten objects, students can group them using a ten-frame to represent groups of ten with ones left over | ☐ Student can use ten frames, base ten blocks, and/or place value charts to represent place value understanding of numbers 1-30<br><br>*Example: Modeling the number 23 as 2 tens and 3 ones* | ☐ Student can use base ten blocks and/or place value charts to represent place value understanding of numbers 30-99<br><br>*Example: Modeling the number 65 as 6 tens and 5 ones* | ☐ Student can use base ten blocks and/or place value charts to represent place value understandin g of numbers 1-999 |

NOTES:

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

## Number and Operations– Fractions (3.NF) - Differentiate Fractional Parts

| 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 |
|---|---|---|---|---|---|---|
| Develop understanding of fractions as numbers (Standards 3.NF.1–3) (Concepts and Applications) | EE.3.NF.1–3. Differentiate a fractional part from a whole. | ☐ Student is not demonstrating skills at an emergent level | ☐ Students can put together two pieces to make a shape that relates to the whole.<br><br>*Example: Two semi-circles to make a circle, or two squares to make a rectangle.* | ☐ Students can divide a model of a shape into two or more equal parts. | ☐ When presented with models/pictures of a whole shape, a shape cut into equal fraction parts, and a shape cut into unequal parts, the student can distinguish which model shows the whole shape, and which model shows fractional parts.<br><br>*Example:*<br> | ☐ Students can name/indicate the specific fraction shown when presented with a whole cut into equal pieces.<br><br>*Example: Explaining that when a shape is cut into 4 pieces, each piece is ¼ of the whole shape.* |

NOTES:

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

## Measurement and Data (3.MD) - 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 |
|---|---|---|---|---|---|---|
| Represent and interpret data (Standards 3.MD.3–4) (Concepts and Applications) | EE.3.MD.4. Measure length of objects using standard tools, such as rulers, yardsticks, and meter sticks. | ☐ 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 | ☐ Students can use non-standard units to measure an object and identify the length of the object in non-standard units.<br>*Example: How many paperclips long is the object?* | ☐ Students can use a ruler, yard stick, or meter stick to measure an object and identify the length of the object to the nearest whole unit. | ☐ Students can use a ruler, yard stick, or meter stick to measure an object and identify the length of the object to the nearest half inch. |

NOTES:

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

## Geometry (3.G) - Attributes of Shapes

| 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 3.G.1–2) (Concepts and Applications) | EE.3.G.1. Describe attributes of two-dimensional shapes. | ☐ Student is not demonstrating skills at an emergent level | ☐ Students can sort and group a variety of shapes based on their attributes.<br><br>*Example: Sorting different sized triangles, squares, etc. into groups of their respective shape* | Students can count the number of sides and angles on a variety of shapes.<br>☐ Circles<br>☐ Triangles<br>☐ Squares<br>☐ Pentagons<br>☐ Hexagons | ☐ Students can describe different shapes based on their attributes: sides (number and length) and angles.<br><br>*Example: A square has four angles and four sides that are all equal lengths* | ☐ Students can group a variety of shapes into groups of rhombuses, rectangles, and squares. |

**Counting may be verbal or non-verbal, using the way they demonstrate this skill during instruction.*

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- Repeated Addition | /5 | /5 | /5 |
| Number and Operations in Base Ten- Place Value Understanding | /5 | /5 | /5 |
| Number and Operations– Differentiate Fractional Parts | /5 | /5 | /5 |
| Measurement and Data- Standard Units of Measurement | /5 | /5 | /5 |
| Geometry- Attributes of Shapes | /5 | /5 | /5 |
| Total Points | /25<br>Date: | /25<br>Date: | /25<br>Date: |

## Scoring Guide

Beginning of Year (BOY)

| Initial Performance | Score |
|---|---|
| 5 points | Alternate No |
| 6 to 10 | Alternate No |
| 11 to 15 | Alternate Yes |
| 16 to 20 | Alternate Yes |
| 21 to 25 | Alternate Yes |

★ If student is scoring 21-25 or in 4 out 5 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 Performance Points:

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

★ If student is scoring 21-25 or in 4 out 5 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 Performance Points:

| 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<br>or<br>Reached **At Target** for 4/5 strands. | Typical Progress | Alternate Yes |
| Student scored **6 to 7** points more than BOY<br>or<br>Reached **At Target** for all strands. | Above Typical Progress | Alternate Yes |
| Student scored **8 or more** points more than BOY<br>or<br>Reached **Advanced** for 4/5 strands. | Well-Above Typical Progress | Alternate Yes |

★ If student is scoring 21-25 or in 4 out 5 strands at target or above, IEP team should consider if the student can access the regular Acadience Math Benchmark assessment.