# EARLY MATH ALTERNATE ASSESSMENT

# GRADE 1

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 - 1st 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).**

## Operations and Algebraic Thinking (1.0A) - Representing 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 addition and subtraction (Computation Measure) | EE.1.OA.1.a. Represent addition with objects, fingers, mental images, drawings, sounds (e.g., claps), or acting out situations. | ☐ Student is not demonstrating skills at an emergent level | ☐ Student can identify numerals 1-5<br>☐ When presented with 2 groups of objects, the student can identify the group of objects that is more | ☐ Student can use math manipulatives to represent values 0-5<br>☐ Student can understand that the "+" sign means putting groups of objects together | ☐ Student can represent addition by putting 2 groups of objects together to make one group that represents the sum<br>☐ Student can model a single digit addition problem with manipulatives when presented with a written equation<br>*Example: 2 + 1=3* | ☐ Student can use math manipulatives or other representations to solve single digit addition problems up to sums of 10 |

NOTES:

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

## Operations and Algebraic Thinking (1.0A) - Representing 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 |
|---|---|---|---|---|---|---|
| Represent and solve problems involving addition and subtraction (Computation Measure) | EE.1.OA.1.a. Represent subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), or acting out situations. | ☐ Student is not demonstrating skills at an emergent level | ☐ Student can identify numerals 1-5<br>☐ When presented with 2 groups of objects, the student can identify the group of objects that is less | ☐ Student can use math manipulatives or other representations to represent values 0-5<br>☐ 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 removing objects from a group and explain/convey that what is left is less than the original group<br>☐ Student can model a single digit subtraction problem, with manipulatives or other representations, when presented with an equation<br>*Example: 4 - 2=2* | ☐ Student can use math manipulatives or other representations to solve single digit subtraction problems for differences within 10 |

NOTES:

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

## Number and Operations in Base Ten (1.NBT)- Counting

| 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 |
|---|---|---|---|---|---|---|
| Extend the counting sequence (Next Number Fluency,) | EE.1.NBT.1.a. Count by ones to 30 | ☐ Student is not demonstrating skills at an emergent level | ☐ Student can independently count* to 10, starting with one | ☐ Student can independently count* to 20 by ones, starting with one | ☐ Student can independently count* to 30 by ones, starting with one | Student can independently count* to 50 by ones:<br>☐ starting at one<br>☐ starting at a number other than one |

**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:

## Number and Operations in Base Ten (1.NBT) - Counting and Cardinality

| 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 |
|---|---|---|---|---|---|---|
| Extend the counting sequence (Next Number Fluency,) | EE.1.NBT.1.b. Count as many as 10 objects and represent the quantity with the corresponding numeral. | ☐ Student is not demonstrating skills at an emergent level | ☐ When teacher presents objects in quantities of 1-5, student can count* objects using one-to-one correspondence | ☐ When teacher presents objects in quantities of 1-10, student can count* objects using one-to-one correspondence and convey the total number of objects | ☐ When the teacher presents objects in quantities of 1-10, students can count* objects using one-to-one correspondence and identify the corresponding written numeral | ☐ When teacher presents objects in quantities of 10-50, student can count* objects using one-to-one correspondence and identify the corresponding written numeral |

**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:

# Number and Operations in Base Ten (1.NBT) - Quantity Discrimination

| 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 (Advanced Quantity Discrimination) | EE.1.NBT.3. Compare two groups of 10 or fewer items when the number of items in each group is similar | ☐ Student is not demonstrating skills at an emergent level | When presented with two groups of objects **(10 or fewer)** where the number of items in **each group is clearly different** (4 or more objects difference between groups), student can identify:<br>☐ which group is more<br>☐ which group is less<br>☐ if they are the same (equal) | When presented with two groups of objects **(5 or fewer)** where the number of items in **each group is similar** (no more than 2 objects difference between groups), student can identify:<br>☐ which group is more<br>☐ which group is less<br>☐ if they are the same (equal) | When presented with two groups of objects **(10 or fewer)** where the number of items in **each group is similar** (no more than 2 objects difference between groups), student can identify:<br>☐ which group is more<br>☐ which group is less<br>☐ if they are the same (equal) | Student can compare numbers between 1 and 10 by using the symbols (placing a symbol card, writing the symbol, circling the correct symbol):<br>☐ greater than (>)<br>☐ less than (<)<br>☐ equal to (=) |

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 - Representing Addition | /5 | /5 | /5 |
| Operations and Algebraic Thinking - Representing Subtraction | /5 | /5 | /5 |
| Number and Operations in Base Ten - Counting | /5 | /5 | /5 |
| Number and Operations in Base Ten - Counting and Cardinality | /5 | /5 | /5 |
| Number and Operations in Base Ten - Quantity Discrimination | /5 | /5 | /5 |
| Total Points | /25 | /25 | /25 |
| 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.