# Kansas Early Math Alternate Assessment Rubrics KDG-3rd grade





January 2025



900 S.W. Jackson Street, Suite 600 Topeka, Kansas 66612-1212 (785) 296-3203 www.ksde.org/board

#### SUCCESS DEFINED

- A successful Kansas high school graduate has the
- Academic preparation,
- Cognitive preparation,
- Technical skills.
- · Employability skills and Civic engagement

to be successful in postsecondary education. in the attainment of an industry recognized certification or in the workforce, without the need for remediation.

#### OUTCOMES

- Social-emotional growth
- Kindergarten readiness
- Individual Plan of Study
- Civic engagement
- Academically prepared for postsecondary
- High school graduation
- Postsecondary success

# Kansas State Board of Education

DISTRICT 3

BOARD MEMBERS

Danny Zeck

Vice Chair

Danny.Zeck@ksde.gov

DISTRICT 6

Dr. Beryl A. New

Beryl.New@ksde.gov

COMMISSIONER OF

EDUCATION

Dr. Randy Watson

Randy,Watson@ksde.gov





Michelle Dombrosky Melanie Haas Michelle.Dombrosky@ Melanie Haas@ksde. ROV

Connie O'Brien Connie.O'brien@ksde. gov

DISTRICT 4

Chair Cathy Hopkins@ksde. gov

DISTRICT 5

Cathy Hopkins

DISTRICT 10





DISTRICT 9

**Im Porter** 



MISSION

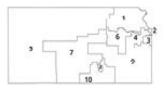
To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.

#### VISION

Kansas leads the world in the success of each student.

#### MOTTO

Kansans Can





Dr. Frank Harwood Frank.Harwood@ksde.gov

DEPUTY COMMISSIONER

**Division of Learning Services** 



Dr. Ben Proctor

The Kenter Links Department of Education does not disclosured on the havin of non-code, singless, national origin, and, sholling on a given to program and a context and provides equal access to the day. Secure and other designated yould groups. The following person has been designated to bandle acquise regarding the condectionation policies. KER Germal Control, Offer of Germal Control, KER, tandes fibre Office Building, NO S W Junice, Selle 122, Tearra AS 68612, (1951) 96-1221

Kansas leads the world in the success of each student.





Dennis Hershberger

Dennis Hershberger@

ksde.gov



Betty Arnold Betty. Arnold@ksde.gov

Jim.Porter@ksde.gov

Debby.Potter@ksde.gov

# Table of Contents

Overview1	
Learner Characteristics1	
About the Screener 2	
Scoring	

Kinderga	arten Early Math Alternate Assessment Rubrics	7
١	Numeracy: Counting and Cardinality Know Number Names	
a	and the Count Sequence	7
١	Numeracy: Counting and Cardinality Math Count to Tell the	
١	Number of Objects	8
٩	Numeracy: Counting and Cardinality Compare Numbers	9
١	Numeracy: Counting and Cardinality Compare Numbers 1	0
١	Numeracy: Operations and Algebraic Thinking Understand	
A	Addition as Putting Together and Subtraction as Taking Apar	t
		1
١	Numeracy: Geometry Identify and Describe Shapes	2
S	Score Sheet 1	3
S	Scoring Guide1	3

1st Grade Early Math Alternate Assessment Rubrics	16
Operations and Algebraic Thinking (1.OA)- Representing	
Addition	16
Operations and Algebraic Thinking (1.OA)– Representing	
Subtraction	17
Number and Operations in Base Ten (1.NBT)- Counting	18
Number and Operations in Base Ten (1.NBT) – Counting a	nd
Cardinality	19

Number and Operations in Base Ten (1.NBT) – Quantity Discrimination
2nd Grade Early Math Alternate Assessment Rubrics 24
Operations and Algebraic Thinking (2.OA) – Represent
Addition24
Operations and Algebraic Thinking (2.OA) – Represent
Subtraction
Operations and Algebraic Thinking (2.0A) – Equal Groups 26
Number and Operations in Base Ten (2.NBT) – Place Value Understanding
Measurement and Data (2.MD) – Non-Standard Units of
Measurement
Geometry (2.G) – Shape Identification
Scoring Sheet
Scoring Guide
3rd Grade Early Math Alternate Assessment Rubrics32
Operations and Algebraic Thinking (3.OA) – Repeated
Addition
Number and Operations in Base Ten (3.NBT) – Place Value
Understanding
Number and Operations in Base Ten (3.NF) – Differentiate
Fractional Parts34
Measurement and Data (3.MD) – Standard Units of
Measurement35
Geometry (3.G) – Attributes of Shapes
Scoring Sheet
Scoring Guide36

# Kansas Early Math Alternate Assessment Rubrics - KDG-3rd grade. Overview

The path to leading the world in the success of each student depends on the ability to understand early numeracy skills as they relate to skills within mathematics strands that are aligned to the skills assessed in operations and algebraic thinking, number and operations in base ten, measurement and data, and geometry. For some students, standard assessments are not an appropriate measure for determining their math proficiency. As such, the Kansas Early Math Alternate Assessment Rubrics were developed as an alternate assessment for students with a **most significant cognitive disability (SWSCD)**.

The term "most significant cognitive disability" isn't a separate category of disability. It is a designation given to a small number of students with disabilities for purposes of participation in the statewide student assessment program. This subgroup of students is referred to in the Individuals with Disabilities Education Act (IDEA) and the Elementary and Secondary Education Act (ESEA) as having the "most significant cognitive disabilities" constitutes less than 1% of the student population. The students are within one or more of the existing categories of disability under IDEA (e.g.., Intellectual disability, autism, multiple disabilities), and whose cognitive impairments and adaptive behaviors may prevent them from attaining grade-level achievement standards even with extensive direct individualized instruction and substantial supports.

#### Learner Characteristics

- A most significant cognitive disability with co-existing deficits in both communication and adaptive behavior. Typically functioning 2 1/2 or more SD below the mean.
- A most significant cognitive disability impacts learning, memory, judgment, and processing which impacts learning acquisition.
- Perform substantially below grade level expectations on the academic content standards for the age-appropriate grade they are enrolled, even with the use of accommodations and modifications.
- Require extensive, specially designed individualized instruction, and substantial supports to achieve measurable gains in the grade-and ageappropriate curriculum (at a reduced depth, breadth, and complexity).
- Requires more time for:
  - a. Processing
  - **b.** Opportunities to generalize language.
  - c. Time to learn and process language.
  - d. Alternate ways to communicate including augmentative.
  - e. Alternative communication to supplement or replace speech or writing.

#### About the Screener

The Kansas Early Math Alternate Assessment Rubrics are simple rubrics that assesses students' early numeracy skills as they relate to skills within mathematics strands that are aligned to the skills assessed in operations and algebraic thinking, number and operations in base ten, measurement and data, and geometry.

The following factors must be met for a student to be eligible to take the Kansas Early Math Alternate Assessment Rubrics:

- Student is in grades Kindergarten, 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> grade; and
- Student has a most significant cognitive disability that significantly impacts intellectual functioning and adaptive behavior; and
- Student is learning content linked to the DLM Essential Elements; and
- Student requires extensive, repeated, direct individualized instruction and substantial supports to achieve measurable gains in the grade-andage-appropriate curriculum, and
- Determined by the IEP team.

Participation in the alternate screener is NOT determined by:

- A disability category or label.
- Poor attendance or extended absences.
- Native language/social/cultural or economic difference.
- Educational environment or instructional setting.
- Low reading level/achievement level.
- Anticipated student's disruptive behavior.
- Impact of student scores on accountability system.
- Anticipated emotional duress.
- Need for accommodations (e.g., assistive technology/augmentative and alternative communication (AAC)) to participate in the assessment process.

The rubrics are an option for special education teachers to use for students with significant cognitive disabilities who require an alternate district assessment. The rubrics are completed based on the student's current grade level by their teacher, based on the student's performance on IEP goals and everyday mathematics instruction within the classroom. Students should be allowed to use the accommodations they use on a regular basis that are included in their IEP for this assessment. For students in 4<sup>th</sup> grade or above, IEP teams may choose to utilize the fall and spring instructionally embedded DLM assessments and reports for an alternate district assessment.



#### Scoring

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 score will then be determined by the Scoring Guide. For beginning of year, the score is dependent on points, whereas in middle and end of year, the students' 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).

Example student Score Sheet: for First Grade

Strands	Beginning of Year (BOY)	Middle of Year (MOY)	End of Year (EOY)
Operations and Algebraic Thinking - Representing Addition	<b>1</b> /5	<b>2</b> /5	<b>3</b> /5
Operations and Algebraic Thinking - Representing	<mark>2</mark> /5	<mark>2</mark> /5	<b>2</b> /5
Subtraction			
Number and Operations in Base Ten - Counting	<b>1</b> /5	<b>2</b> /5	<mark>3</mark> /5
Number and Operations in Base Ten - Counting and	<b>2</b> /5	<b>2</b> /5	<b>2</b> /5
Cardinality			
Number and Operations in Base Ten - Quantity	<b>2</b> /5	<b>3</b> /5	<b>3</b> /5
Discrimination			
Total Points	<mark>8</mark> /25	<b>11</b> /25	<b>13</b> /25
	Date:	Date:	Date:

Beginning of Year (BOY) Scores for example student

Initial Performance	Score
5 points	Below Benchmark
6 to 10	Below Benchmark
11 to 15	At or Above Benchmark
16 to 20	At or Above Benchmark
21 to 25	At or Above Benchmark

Middle of Year (MOY) Scores for example student

Initial Performance Points: 8

Growth	Progress	Score
Student scored <b>0</b> point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>1 to 2</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>3 to 4</b> points more than BOY or Reached <b>Approaching Target</b> for 4/5 strands	Typical Progress	At or Above Benchmark
Student scored <b>5</b> points more than BOY or Reached <b>At Target</b> for 4/5 strands	Above Typical Progress	At or Above Benchmark
Student scored <b>6</b> points or more than BOY or Reached <b>Advanced</b> for 4/5 strands	Well-Above Typical Progress	At or Above Benchmark

★ 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 district math benchmark assessment.

#### End of Year (EOY) Scores for example student

Initial Performance Points: 8

Growth	Progress	Score
Student scored 0 to 1 point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored 2 to 3 points more than BOY	Below Typical Progress	Below Benchmark
Student scored 4 to 5 points more than BOY or Reached At Target for 4/5 strands.	Typical Progress	At or Above Benchmark
Student scored 6 to 7 points more than BOY or Reached At Target for all strands.	Above Typical Progress	At or Above Benchmark
Student scored 8 or more points more than BOY or Reached Advanced for 4/5 strands.	Well-Above Typical Progress	At or Above Benchmark

★ 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 district math benchmark assessment.

This document is modified with permission from the Utah State Board of Education Early Literacy Alternate Assessment and KEEP Alternate Assessment.

# Kindergarten Early Math Alternate Assessment Rubrics

Numeracy: Counting and Cardinality Know Number Names and the Count Sequence

	Be	Below Benchmark         At or above Benchmark			
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.CC.1 Starting with one, count to 10 by ones.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can repeat teacher counting 1-5.</li> <li>Student can count with teacher 1-5.</li> </ul>	<ul> <li>Student can repeat teacher counting 1-5.</li> <li>Student can count with teacher 1-5.</li> <li>Student can repeat teacher counting 1-10.</li> <li>Student can count with teacher 1-10.</li> <li>Students can, starting with one, independently count to 5 by ones.</li> </ul>	<ul> <li>Student can repeat teacher counting 1- 5.</li> <li>Student can count with teacher 1-5.</li> <li>Student can repeat teacher counting 1-10.</li> <li>Student can count with teacher 1-10.</li> <li>Students can, starting with one, independently count to 5 by ones.</li> <li>Student can, starting with one, independently count to 10 by ones.</li> </ul>	<ul> <li>Student can, starting with one, independently count to 10 by ones.</li> <li>Student can, starting from a number other than 1, independently count to 10 by ones.</li> <li>Student can, starting with one, independently count to 20 by ones.</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name: \_\_\_\_\_

### Numeracy: Counting and Cardinality Math Count to Tell the Number of Objects

Below Benchmark
-----------------

Below Benchmark			At or above Benchmark		
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.CC.4 Demonstrate one-to- one correspondence, pairing each object with one and only one number and each number with one and only one object.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can place the correct number of counters/objects on pre-set dots one at a time (numbers 1-5).</li> </ul>	<ul> <li>Student can place the correct number of counters/objects on pre-set dots one at a time.</li> <li>When teacher presents objects in quantity 1-5, student can count objects using one- to-one correspondence with teacher.</li> </ul>	<ul> <li>Student can place the correct number of counters/objects on pre-set dots one at a time.</li> <li>When teacher presents objects in quantity 1-5, student can count objects using one- to-one correspondence with teacher.</li> <li>When teacher presents objects in quantity 1-5, student can independently count objects using one-to-one correspondence.</li> </ul>	<ul> <li>When teacher presents objects in quantity 1-5, student will independently count objects using one-to-one correspondence.</li> <li>When teacher presents objects in quantity 1-10, student will independently count objects using one-to-one correspondence.</li> <li>When presented with a set number of objects, student will be able to identify the corresponding written number.</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_\_

# Numeracy: Counting and Cardinality Compare Numbers

		At or above Benchmark			
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.CC.5 Count out up to three objects from a larger set, pairing each object with one and only one number name to tell how many.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	Student can count objects in sequence from 1 to 3, when given the exact number of objects with teacher.	<ul> <li>Student can count objects in sequence from 1 to 3, when given the exact number of objects with teacher.</li> <li>Student can independently count objects in sequence from 1 to 3, when given the exact number of objects.</li> <li>Student can count out 3 objects from a group of more than 3 objects, while saying the corresponding number name with the teacher.</li> </ul>	<ul> <li>Student can count objects in sequence from 1 to 3, when given the exact number of objects with teacher.</li> <li>Student can independently count objects in sequence from 1 to 3, when given the exact number of objects.</li> <li>Student can count out 3 objects from a group of more than 3 objects, while saying the corresponding number name with the teacher.</li> <li>Student can independently count out 3 objects from a group of more than 3 objects, while saying the corresponding number name.</li> </ul>	<ul> <li>Student can independently count out 3 objects from a group of more than 3 objects, while saying the corresponding number name.</li> <li>Student can independently count out 3 objects from a group of more than 10 objects, while saying the corresponding number name.</li> <li>Student can repeat number while counting objects with teacher (number 1-5).</li> <li>Student can identify written numbers 1-5.</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_\_

### Numeracy: Counting and Cardinality Compare Numbers

		Below Benchmark		At or above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.CC.6 Identify whether the number of objects in one group is more or less than (when the quantities are clearly different) or equal to the number of objects in another group.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	Student can identify the difference between a single object and a group of objects.	<ul> <li>Student can identify the difference between a single object and a group of objects.</li> <li>Student can identify the group of objects that is more (using quantities that are clearly different).</li> </ul>	<ul> <li>Student can identify the difference between a single object and a group of objects.</li> <li>Student can identify the group of objects that is more (using quantities that are clearly different).</li> <li>Student can identify the group of objects that is equal.</li> </ul>	<ul> <li>Student can identify the group of objects that is more (using quantities that are clearly different).</li> <li>Student can identify that groups of objects are equal.</li> <li>Student can identify the group of objects that is less (using quantities that are clearly different).</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_

#### Numeracy: Operations and Algebraic Thinking Understand Addition as Putting Together and Subtraction as Taking Apart Below Benchmark

Below Benchmark			At or above Benchmark		
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.OA.1 Represent addition as "putting together" or subtraction as "taking from" in everyday activities.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can put 2 objects together in a group.</li> <li>Student can separate 2 objects into 2 groups.</li> </ul>	<ul> <li>Student can put 2 objects together in a group.</li> <li>Student can separate 2 objects into 2 groups.</li> <li>When given a group of objects student can add one more object.</li> </ul>	<ul> <li>Student can put 2 objects together in a group.</li> <li>Student can separate 2 objects into 2 groups.</li> <li>When given a group of objects student can add one more object.</li> <li>When given a group of objects, student can take away one object from the group.</li> </ul>	<ul> <li>When given a group of objects student can add one more object.</li> <li>When given a group of objects, student can take away one object from the group.</li> <li>Student can put two groups of objects together when asked to "add".</li> <li>Student can take away objects from a group when asked to "subtract".</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_\_

#### Numeracy: Geometry Identify and Describe Shapes

		Below Benchmark			ve Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.K.G.2-3 Match shapes of same size and orientation (circle, square, rectangle, triangle).	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can identify a shape from numbers and letters.</li> </ul>	<ul> <li>Student can identify a shape from numbers and letters.</li> <li>Student can match 2 shapes that are the same size.</li> </ul>	<ul> <li>Student can identify a shape from numbers and letters.</li> <li>Student can match 2 shapes that are the same size.</li> <li>Student can group more than 2 shapes that are the same size and orientation from a variety of shapes (i.e., circle, square, rectangle, triangle).</li> </ul>	<ul> <li>Student can recognize the name of some shapes (circle, square, rectangle triangle).</li> <li>Student can group more than 2 shapes that are the same size and orientation from a variety of shapes (i.e., circle, square, rectangle, triangle).</li> <li>Student can create shapes from a model.</li> <li>Student can identify 1 attribute about shapes.</li> <li>Student can recognize the name of some shapes (circle, square, rectangle triangle).</li> </ul>

BOY Dates:

MOY Dates:

Student Name: \_\_\_\_\_

Score Sheet

Strands	Beginning of Year	Middle of Year	End of Year
Counting and Cardinality know number names and the count sequence	/5	/5	/5
Counting and Cardinality count to tell the number of objects	/5	/5	/5
Counting and Cardinality compare numbers	/5	/5	/5
Counting and Cardinality compare numbers	/5	/5	/5
Operations and Algebraic Thinking understand addition as putting together and subtraction as taking apart	/5	/5	/5
Geometry identify and describe shapes	/5	/5	/5
Total	/30	/30	/30
Date			

Scoring Guide

Beginning of Year (BOY)

Initial Performance	Score
6 Points	Below Benchmark
7 to 12 Points	Below Benchmark
13 to 18 Points	At or Above Benchmark
19 to 24 Points	At or Above Benchmark
25 to 30 Points	At or Above Benchmark

#### Middle of Year (MOY)

Initial Points Score:

Growth	Progress	Score
Student scored <b>0 to 1</b> point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>2 to 3</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>4 to 5</b> points more than BOY or Reached <b>Approaching Target</b> for 5/6 strands	Typical Progress	At or Above Benchmark
Student scored <b>6 to 7</b> points more than BOY or Reached <b>At Target</b> for 5/6 strands	Above Typical Progress	At or Above Benchmark
Student scored <b>8 or more</b> than BOY or Reached <b>Advanced</b> for 5/6 strands	Well-Above Typical Progress	At or Above Benchmark

#### Scoring Guide End of Year (EOY)

Initial Points Score:

Growth	Progress	Score
Student scored <b>0 to 2</b> points more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>3 to 4</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>5 to 6</b> points more than BOY or Reached <b>At Target</b> for 5/6 strands	Typical Progress	At or Above Benchmark
Student scored <b>7 to 8</b> points more than BOY Or Reached <b>At Target</b> for all strands	Above Typical Progress	At or Above Benchmark
Student scored <b>9 or more</b> points more than BOY or Reached <b>Advanced</b> for 5/6 strands	Well-Above Typical Progress	At or Above Benchmark

#### 1st Grade Early Math Alternate Assessment Rubrics Student Name: \_\_\_\_\_

Operations and Algebraic Thinking (1.OA)- Representing Addition

<b>D</b>		
Below	Benchmark	

Below Benchmark				At or above Be	nchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.1.OA.1.a. Represent addition with objects, finders, mental images, drawings, sounds (e.g., claps), or acting out situations.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can identify numerals 1-5.</li> <li>When presented with 2 groups of objects, the student can identify the group of objects that is more.</li> </ul>	<ul> <li>Student can use math manipulatives to represent values 0-5.</li> <li>Student can understand that the "+" sign means putting groups of objects together.</li> </ul>	<ul> <li>Student can represent addition by putting 2 groups of objects together to make one group that represents the sum.</li> <li>Student can model a single digit addition problem with manipulatives when presented with a written equation.</li> <li><i>Example: 2+1=3</i></li> </ul>	Student can use math manipulatives or other representations to solve single digit addition problems up to sums of 10.

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

# Operations and Algebraic Thinking (1.OA)– Representing Subtraction

	Benchmark				
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.1.OA.1.a. Represent subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), or acting out situations.	<ul> <li>Student is not yet demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can identify numerals 1-5.</li> <li>When presented with 2 groups of objects, the student can identify the group of objects that is less.</li> </ul>	<ul> <li>Student can use math manipulatives or other representation to represent values 0- 5.</li> <li>Student can explain/convey that the "-" sign means taking away or finding the difference between the number of objects in two groups.</li> </ul>	<ul> <li>Student can represent subtraction by removing objects from a group and explain/convey that what is left is less than the original group.</li> <li>Student can model a single digit subtraction problem, with manipulatives or other representations, when presented with an equation.</li> <li><i>Example: 4-2=2</i></li> </ul>	<ul> <li>Student can use math manipulative or other representations to solve single digit subtraction problems for differences within 10.</li> </ul>

BOY Dates:

MOY Dates:

# Student Name: \_\_\_\_\_

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

Below Benchmark				At or above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.1.NBT.1.a. Count by ones to 30.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can independently count* to 10, starting with one.</li> </ul>	<ul> <li>Student can independently count* to 20 by ones, starting with one.</li> </ul>	<ul> <li>Student can independently count* to 30 by ones, starting with one.</li> </ul>	<ul> <li>Student can</li> <li>independently count* to</li> <li>50 by ones:</li> <li>Starting at one.</li> <li>Starting at a number other than one.</li> </ul>

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

BOY Dates:

MOY Dates:

#### Student Name:\_\_

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

Below Benchmark At or above Benchmark DLM Essential Elements Approaching Target Not Yet Emerging Emerging At Target Advanced 4 points 2 points 1 point 3 points (Bridge to Kansas Math Standard) 5 points EE.1.NBT.1.b. When the teacher Student is not When teacher When teacher When teacher Count as many as 10 demonstrating skills presents objects in presents objects in presents objects in presents objects in objects and represent at an emergent level. quantities of 1-5, guantities of 1-10, quantities of 1-10, quantities of 10-50, the quantity with the student can count\* students can count\* student can count\* student can count\* objects using one-to corresponding numeral. objects using one-toobjects using one-toobjects using one-toone correspondence one correspondence -one one correspondence and identify the correspondence. and identify the and convey the total corresponding corresponding number of objects. written numeral. written numeral.

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

**BOY Dates:** 

MOY Dates:

# Student Name:\_\_\_\_\_

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

	Below Benchmark				Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.1.NBT.3. Compare two groups of 10 or fewer items when the number of items in each group is similar.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>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:</li> <li>Which group is more.</li> <li>Which group is less.</li> <li>If they are the same (equal).</li> </ul>	<ul> <li>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:</li> <li>Which group is more.</li> <li>Which group is less.</li> <li>If they are the same (equal).</li> </ul>	<ul> <li>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:</li> <li>Which group is more.</li> <li>Which group is less.</li> <li>If they are the same (equal).</li> </ul>	Student can compare numbers between 1 and 10 by using the symbols (placing a symbol card, writing the symbol, circling the correct symbol): Greater than (>) Less than (<) Equal to (=)

**BOY Dates:** 

MOY Dates:

# Student Name:\_\_\_\_\_

#### 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	Below Benchmark
6 to 10	Below Benchmark
11 to 15	At or Above Benchmark
16 to 20	At or Above Benchmark
21 to 25	At or Above Benchmark

#### Middle of Year (MOY)

Initial Performance Points:

Growth	Progress	Score
Student scored ${f 0}$ points more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>1 to 2</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>3 to 4</b> points more than BOY or Reached <b>Approaching Target</b> for 4/5 strands	Typical Progress	At or Above Benchmark
Student scored <b>5</b> points more than BOY or Reached <b>At Target</b> for 4/5 strands	Above Typical Progress	At or Above Benchmark
Student scored <b>6</b> points or more than BOY or Reached <b>Advanced</b> for 4/5 strands	Well-Above Typical Progress	At or Above Benchmark

#### Scoring Guide End of Year (EOY)

Initial Performance Points:

Growth	Progress	Score
Student scored <b>0 to 1</b> point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>2 to 3</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>4 to 5</b> points more than BOY or Reached <b>At Target</b> for 4/5 strands.	Typical Progress	At or Above Benchmark
Student scored <b>6 to 7</b> points more than BOY or Reached <b>At Target</b> for all strands.	Above Typical Progress	At or Above Benchmark
Student scored <b>8 or more</b> points more than BOY or Reached <b>Advanced</b> for 4/5 strands.	Well-Above Typical Progress	At or Above Benchmark

#### 2nd Grade Early Math Alternate Assessment Rubrics Student Name: \_\_\_\_\_

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

	Be	elow Benchmark	At or above	Benchmark	
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.NBT.6-7. Use objects, representations, and numbers (0-20) to add.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can understand that the "+" sign means putting groups of objects together to make a larger group.</li> <li>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.</li> </ul>	<ul> <li>Student can solve addition problems (sums within 0-10) with objects, representations, and numbers.</li> <li>Example: 2+7=? 3+4=? etc.</li> </ul>	<ul> <li>Student can solve addition problems (sums within 0-20) with objects, representations, and numbers.</li> <li>Example: 5+7=? 12+5=? etc.</li> </ul>	Student can fluently solve addition problems with sums within 0-10 using mental math strategies.

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

		Below Benchmark	At or Above	Benchmark	
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.NBT.6-7. Use objects, representations, and numbers (0-20) to subtract.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can explain/convey that the "-" sign means taking away or finding the difference between the number of objects in two groups.</li> <li>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.</li> </ul>	<ul> <li>Student can solve subtraction problems (differences within 0-10) with objects, representations, and numbers.</li> <li>Example: 7-2=? 4-3+? etc.</li> </ul>	<ul> <li>Student can solve subtraction problems (differences within 0- 20) with objects, representations, and numbers.</li> <li>Example: 12-5=? 14-6=? etc.</li> </ul>	<ul> <li>Student can fluently solve subtraction problems for differences within 0- 10 using mental math strategies.</li> </ul>

# Operations and Algebraic Thinking (2.OA) – Represent Subtraction

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

### Operations and Algebraic Thinking (2.OA) – Equal Groups

		Below Benchmark	<	At or Above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.OA.3. Equally distribute even numbers of objects between two groups.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>When presented with two groups of objects (10 or fewer) student can identify if they are the same (equal).</li> </ul>	<ul> <li>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.</li> </ul>	<ul> <li>When given a set of objects (up to 10), the student can distribute the objects into two equal or almost equal sets:</li> <li>Identify if the groups are equal when the number is even.</li> <li>Identify that the sets are not equal when the number is odd.</li> <li>Acknowledge when the two groups are equal or not.</li> </ul>	<ul> <li>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.</li> <li>Example: Two groups of two objects can be represented by 2+2=4.</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_\_

#### Number and Operations in Base Ten (2.NBT) – Place Value Understanding Relow Benchmark

	Below Benchmark			At or Above Bend	chmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.NBT.1. Represent numbers up to 30 with sets of tens and ones using objects in columns or arrays.	<ul> <li>Student is not demonstrating skills at an emerging level</li> </ul>	<ul> <li>Student can create a set of 10 using a ten frame.</li> </ul>	<ul> <li>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.</li> </ul>	When presented with a number (1-29), 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 place value of that number by drawing, writing, or using objects.

BOY Dates:

MOY Dates:

EOY Dates:

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

	Below Benchmark			At or Above Bend	chmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.MD.1. Measure the length of objects using non-standard units.	<ul> <li>Student is not demonstrating skills at an emerging level.</li> </ul>	<ul> <li>Student can determine if the length of an object is longer or shorter than another object.</li> </ul>	<ul> <li>Student can align non- standard units (ex. Paperclips, colored tiles) end-to-end to measure an object.</li> </ul>	<ul> <li>Students can use non- standard units to measure an object and identify the length of the object in non-standard units.</li> <li>Example: How many paperclips long is the object?</li> </ul>	Student can measure an object and identify the length of that object in standard units (1-5 inches).

**BOY Dates:** 

MOY Dates:

# Student Name:\_\_\_\_\_

# Geometry (2.G) – Shape Identification

	Below Benchmark			At or Above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.2.G.1. Identify common two- dimensional shapes: square, circle, triangle, and rectangle.	<ul> <li>Student is not demonstrating skills at an emerging level.</li> </ul>	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.	<ul> <li>Student can identify</li> <li>these shapes by their</li> <li>attributes:</li> <li>Square</li> <li>Circle</li> <li>Triangle</li> <li>Rectangle.</li> </ul> Example: which shape has 4 equal sides?

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

#### 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	Below Benchmark
7 to 12 Points	Below Benchmark
13 to 18 Points	At or Above Benchmark
19 to 24 Points	At or Above Benchmark
25 to 30 Points	At or Above Benchmark

<sup>★</sup> If student is scoring 25-30 or at target or above in 5 out 6 strands, IEP team should consider if the student can access the general math benchmark assessment.

#### Middle of Year (MOY)

Initial Points Score:

Growth	Progress	Score
Student scored <b>0 to 1</b> point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>2 to 3</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>4 to 5</b> points more than BOY or Reached <b>Approaching Target</b> for 5/6 strands	Typical Progress	At or Above Benchmark
Student scored <b>6 to 7</b> points more than BOY or Reached <b>At Target</b> for 5/6 strands	Above Typical Progress	At or Above Benchmark
Student scored <b>8 or more</b> than BOY or Reached <b>Advanced</b> for 5/6 strands	Well-Above Typical Progress	At or Above Benchmark

#### Scoring Guide End of Year (EOY)

Initial Points Score:

Growth	Progress	Score
Student scored <b>0 to 2</b> points more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>3 to 4</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>5 to 6</b> points more than BOY or Reached <b>At Target</b> for 5/6 strands	Typical Progress	At or Above Benchmark
Student scored <b>7 to 8</b> points more than BOY Or Reached <b>At Target</b> for all strands	Above Typical Progress	At or Above Benchmark
Student scored <b>9 or more</b> points more than BOY or Reached <b>Advanced</b> for 5/6 strands	Well-Above Typical Progress	At or Above Benchmark

# 3rd Grade Early Math Alternate Assessment Rubrics *Student Name*:\_\_\_\_\_

#### Operations and Algebraic Thinking (3.OA) – Repeated Addition

		Below Benchmark	K	At or Above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.3.OA.1-2. Use repeated addition to find the total number of objects and determine the sum.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	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.	<ul> <li>When presented with three or more equal groups of objects, student can create a repeated addition equation to find the sum.</li> <li>Examples: 2+2+2=6 4+4+4+4=16</li> </ul>	<ul> <li>When presented with three or more equal groups of objects, student can relate the repeated addition sentence to the related multiplication equation.</li> <li>Example: 2+2+2=6 3x2+6</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name: \_\_\_\_\_

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

		Below Benchmarl	K	At or Above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.3.NBT.2. Demonstrate understanding of place value to tens. Big Idea: The value of a digit depends on its place, or position, in the number.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	When presented with more than ten objects, students can group them using a ten-frame to represent groups of ten with ones left over.	<ul> <li>Student can use ten frames, base ten blocks, and/or place value charts to represent place value understanding of numbers 1-30.</li> <li>Examples: Modeling the number 23 as 2 tens and 3 ones.</li> </ul>	<ul> <li>Student can use base ten blocks and/or place value charts to represent place value understanding of numbers 31-99.</li> <li>Example: Modeling the number 65 as 6 tens and 5 ones.</li> </ul>	<ul> <li>Student can use base ten blocks and/or place value charts to represent place value understanding of numbers 100-999</li> </ul>

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

Below Benchmark			At or Above	Benchmark	
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.3.NF.1-3. Differentiate a fractional part from a whole.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can put together two pieces to make a shape that relates to the whole.</li> <li>Examples: Two semi- circles to make a circle, or two squares to make a rectangle.</li> </ul>	<ul> <li>Student can divide a model of a shape into two or more equal parts.</li> </ul>	<ul> <li>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.</li> <li>Example:</li> </ul>	<ul> <li>Student can name/indicate the specific fraction shown when presented with a whole cut into equal pieces.</li> <li>Example: Explaining that when a shape is cut into 4 pieces, each piece is ¼ of the whole shape.</li> </ul>

# Number and Operations in Base Ten (3.NF) – Differentiate Fractional Parts

BOY Dates:

MOY Dates:

# Student Name:\_\_\_\_\_

# Measurement and Data (3.MD) – Standard Units of Measurement

		Below Benchmark	<	At or Above	Benchmark
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.3.MD.4 Measure length of objects using standard tools, such as rulers, yardsticks, and meter sticks.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can determine if the length of an object is longer or shorter than another object.</li> </ul>	<ul> <li>Student can use non-standard units to measure an object and identify the length of the object to the nearest whole units.</li> <li>Example: How many paperclips long is the object?</li> </ul>	Student 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.	Student 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.

BOY Dates:

MOY Dates:

EOY Dates:

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

	Below Benchmark		At or Above	Benchmark	
DLM Essential Elements	Not Yet Emerging 1 point	Emerging 2 points	Approaching Target 3 points	At Target 4 points	Advanced (Bridge to Kansas Math Standard) 5 points
EE.3.G.1 Describe attributes of two-dimensional shapes.	<ul> <li>Student is not demonstrating skills at an emergent level.</li> </ul>	<ul> <li>Student can sort and group a variety of shapes based on their attributes.</li> <li>Examples: Sorting different sized triangles, squares, etc. into groups of their respective shape.</li> </ul>	Student can count the number of sides and angles on a variety of shapes. Circles Triangles Squares Pentagons Hexagons	<ul> <li>Student can describe different shapes based on their attributes: sides (number and length) and angles.</li> <li>Examples: A square has four angles and four sides that are all equal lengths.</li> </ul>	<ul> <li>Student can group a variety of shapes into groups of rhombuses, rectangles, and squares.</li> </ul>

BOY Dates:

MOY Dates:

#### Student Name:\_\_\_\_\_

#### 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 Date:	/25 Date:	/25 Date:

#### Scoring Guide

Beginning of Year (BOY)

Initial Performance	Score
5 points	Below Benchmark
6 to 10	Below Benchmark
11 to 15	At or Above Benchmark
16 to 20	At or Above Benchmark
21 to 25	At or Above Benchmark

#### Middle of Year (MOY)

Initial Performance Points:

Growth	Progress	Score
Student scored <b>0</b> points more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>1 to 2</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>3 to 4</b> points more than BOY or Reached <b>Approaching Target</b> for 4/5 strands	Typical Progress	At or Above Benchmark
Student scored <b>5</b> points more than BOY or Reached <b>At Target</b> for 4/5 strands	Above Typical Progress	At or Above Benchmark
Student scored <b>6</b> points or more than BOY or Reached <b>Advanced</b> for 4/5 strands	Well-Above Typical Progress	At or Above Benchmark

#### Scoring Guide End of Year (EOY)

Initial Performance Points:

Growth	Progress	Score
Student scored <b>0 to 1</b> point more than BOY	Well-Below Typical Progress	Below Benchmark
Student scored <b>2 to 3</b> points more than BOY	Below Typical Progress	Below Benchmark
Student scored <b>4 to 5</b> points more than BOY or Reached <b>At Target</b> for 4/5 strands.	Typical Progress	At or Above Benchmark
Student scored <b>6 to 7</b> points more than BOY or Reached <b>At Target</b> for all strands.	Above Typical Progress	At or Above Benchmark
Student scored <b>8 or more</b> points more than BOY or Reached <b>Advanced</b> for 4/5 strands.	Well-Above Typical Progress	At or Above Benchmark

For more information, contact:

Cary Rogers Education Program Consultant Special Education and Title Services 785-296-0916 cary.rogers@ksde.gov



Kansas State Department of Education 900 S.W. Jackson Street, Suite 102 Topeka, Kansas 66612-1212 www.ksde.gov