*MATHEMATICS SAMPLE*

**K-3 Mathematics 2016 Standards of Learning Achievement Record**

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

**School: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ School Year: Grade K: \_\_\_\_\_ Grade 1: \_\_\_\_\_ Grade 2: \_\_\_\_\_ Grade 3: \_\_\_\_\_**

# **Levels of Performance Scoring Rubric:**

1. - Exceeds the Standard (Student demonstrated knowledge and skills 94-100% of the time.)
2. - Meets the Standard (Student demonstrated knowledge and skills 80-93% of the time.)

2 - Partially Meets the Standard (Student demonstrated knowledge and skills 70-79% of the time.)

1 - Inadequate or No Understanding of the Standard (Student demonstrated knowledge and skills less than 70% of the time.)

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| **RECORD OF INTERVENTION / REMEDIATION SERVICES** |
| **DATE** | **EXPLANATION OF SERVICES AND RESULTS** | **DURATION OF SERVICES** |
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| **Grade K** | **Score** | **Grade 1** | **Score** | **Grade 2** | **Score** | **Grade 3** | **Score** |
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| ◆ Number & Number Sense |  | **◆ Number & Number Sense** |  | **◆ Number & Number Sense** |  | **◆ Number & Number Sense** |  |
| K.1The student willa) tell how many are in a given set of 20 or fewer objects by counting orally; andb)read, write, and represent numbers from 0 through 20.  |  | 1.1 The student will1. count forward orally by ones to 110, starting at any number between 0 and 110;
2. write the numerals 0 to 110 in sequence and out-of-sequence;
3. count backward orally by ones when given any number between 1 and 30; and
4. count forward orally by ones, twos, fives, and tens to determine the total number of objects to 110.
 |  | 2.1 The student will1. read, write, and identify the place and value of each digit in a three-digit numeral, with and without models;
2. identify the number that is 10 more, 10 less, 100 more, and 100 less than a given number up to 999;
3. compare and order whole numbers between 0 and 999; and
4. round two-digit numbers to the nearest ten.
 |  | 3.1 The student willa) read, write, and identify the place and value of each digit in a six-digit whole number, with and without models;b) round whole numbers, 9,999 or less, to the nearest ten, hundred, and thousand; andc) compare and order whole numbers, each 9,999 or less.  |  |
| K.2The student, given no more than three sets, each set containing 10 or fewer concrete objects, will 1. compare and describe one set as having more, fewer, or the same number of objects as the other set(s); and
2. compare and order sets from least to greatest and greatest to least.
 |  | 1.2 The student, given up to 110 objects, will 1. group a collection into tens and ones and write the corresponding numeral;
2. compare two numbers between 0 and 110 represented pictorially or with concrete objects, using the words *greater than, less than* or *equal to*;and
3. order three or fewer sets from least to greatest and greatest to least.
 |  | 2.2 The student will1. count forward by twos, fives, and tens to 120, starting at various multiples of 2, 5, or 10;
2. count backward by tens from 120; and
3. use objects to determine whether a number is even or odd.
 |  | 3.2 The student willa) name and write fractions and mixed numbers represented by a model;b) represent fractions and mixed numbers with models and symbols; andc) compare fractions having like and unlike denominators, using words and symbols (>, <, =, or ≠), with models. |  |
| K.3 The student will1. count forward orally by ones from 0 to 100;
2. count backward orally by ones when given any number between 1 and 10;
3. identify the number after, without counting, when given any number between 0 and100 and identify the number before, without counting, when given any number between 1 and 10; and
4. count forward by tens to determine the total number of objects to 100.
 |  | 1.3 The student, given an ordered set of ten objects and/or pictures, will indicate the ordinal position of each object, first through tenth. |  | 2.3 The student will1. count and identify the ordinal positions first through twentieth, using an ordered set of objects; and
2. write the ordinal numbers 1st through 20th.
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| K.4 The student will 1. recognize and describe with fluency part-whole relationships for numbers up to 5; and
2. investigate and describe part-whole relationships for numbers up to 10.
 |  | 1.4 The student will 1. represent and solve practical problems involving equal sharing with two or four sharers; and
2. represent and name fractions for halves and fourths, using models.

1.5 The student, given a familiar problem situation involving magnitude, willa) select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, 500); andb) explain the reasonable- ness of the choice. |  | 2.4 The student willa) name and write fractions represented by a set, region, or length model for halves, fourths, eighths, thirds, and sixths;b) represent fractional parts with models and with symbols; andc) compare the unit fractions for halves, fourths, eighths, thirds, and sixths, with models. |  |  |  |
| K.5 The student will investigate fractions by representing and solving practical problems involving equal sharing with two sharers. |

| ◆ Computation & Estimation |  | ◆ Computation & Estimation |  | ◆ Computation & Estimation |  | ◆ Computation & Estimation |  |
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| K.6 The student will model and solve single-step story and picture problems with sums to 10 and differences within 10, using concrete objects. |  | 1.6 The student will create and solve single-step story and picture problems using addition and subtraction within 20. |  | 2.5 The student will 1. recognize and use the relationships between addition and subtraction to solve single-step practical problems, with whole numbers to 20; and
2. demonstrate fluency with addition and subtraction within 20.
 |  | 3.3 The student will 1. estimate and determine the sum or difference of two whole numbers; and
2. create and solve single-step and multistep practical problems involving sums or differences of two whole numbers, each 9,999 or less.
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|  |  | 1.7 The student will 1. recognize and describe with fluency part-whole relationships for numbers up to 10; and
2. demonstrate fluency with addition and subtraction within 10.
 |  | 2.6 The student will1. estimate sums and differences;
2. determine sums and differences, using various methods; and
3. create and solve single-step and two-step practical problems involving addition and subtraction.
 |  | 3**.**4The student will 1. represent multiplication and division through 10 × 10, using a variety of approaches and models;
2. create and solve single-step practical problems that involve multiplication and division through 10 x 10;
3. demonstrate fluency with multiplication facts of 0, 1, 2, 5, and 10; and
4. solve single-step practical problems involving multiplication of whole numbers, where one factor is 99 or less and the second factor is 5 or less.
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|  |  |  |  |  |  | 3.5 The student will solve practical problems that involve addition and subtraction with proper fractions having like denominators of 12 or less. |  |

|  **Grade K** | **Score** | **Grade 1** | **Score** | **Grade 2** | **Score** | **Grade 3** | **Score** |
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| ◆ Measurement & Geometry |  | **◆ Measurement & Geometry** |  | **◆ Measurement & Geometry** |  | **◆ Measurement & Geometry** |  |
| K.7 The student will recognize the attributes of a penny, nickel, dime, and quarter and identify the number of pennies equivalent to a nickel, a dime, and a quarter. |  | 1.8 The student will determine the value of a collection of like coins (pennies, nickels, or dimes) whose total value is 100 cents or less. |  | 2.7 The student willa) count and compare a collection of pennies, nickels, dimes, and quarters whose total value is $2.00 or less; andb) use the cent symbol, dollar symbol, and decimal point to write a value of money. |  | 3.6 The student will 1. determine the value of a collection of bills and coins whose total value is $5.00 or less;
2. compare the value of two sets of coins or two sets of coins and bills;and
3. make change from $5.00 or less.
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| K.8 The student will investigate the passage of time by reading and interpreting a calendar.  |  | 1.9 The student will investigate the passage of time and1. tell time to the hour and half-hour, using analog and digital clocks; and
2. read and interpret a calendar.
 |  | 2.8 The student will estimate and measurea) length to the nearest inch; and 1. weight to the nearest pound.
 |  | 3.7 The student will estimate and use U.S. Customary and metric units to measurea) length to the nearest $\frac{1}{2}$ inch, inch, foot, yard, centimeter, and meter; andb) liquid volume in cups, pints, quarts, gallons, and liters. |  |
| K.9 The student will compare two objects or events, using direct comparisons, according to one or more of the following attributes: length (longer, shorter), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder), volume (more, less), and time (longer, shorter). |  | 1.10 The student will use nonstandard units to measure and compare length, weight, and volume.  |  | 2.9 The student will tell time and write time to the nearest five minutes, using analog and digital clocks. |  | 3.8The student will estimate and 1. measure the distance around a polygon in order to determine its perimeter using U.S. Customary and metric units; and
2. count the number of square units needed to cover a given surface in order to determine its area.
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| K.10 The student will1. identify and describe plane figures (circle, triangle, square, and rectangle);
2. compare the size (smaller, larger) and shape of plane figures (circle, triangle, square, and rectangle); and
3. describe the location of one object relative to another (above, below, next to) and identify representations of plane figures (circle, triangle, square, and rectangle) regardless of their positions and orientations in space.
 |  | 1.11 The student will 1. identify, trace, describe, and sort plane figures (triangles, squares, rectangles, and circles) according to number of sides, vertices, and angles; and
2. identify and describe representations of circles, squares, rectangles, and triangles in different environments, regardless of orientation, and explain reasoning.
 |  | 2.10 The student willa) determine past and future days of the week; andb) identify specific days and dates on a given calendar. |  | 3.9 The student will1. tell time to the nearest minute, using analog and digital clocks;
2. solve practical problems related to elapsed time in one-hour increments within a 12-hour period; and
3. identify equivalent periods of time and solve practical problems related to equivalent periods of time.
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|  |  |  |  | 2.11 The student will read temperature to the nearest 10 degrees.  |  | 3.10 The student will read temperature to the nearest degree. |  |
|  |  |  |  | 2.12 The student will1. draw a line of symmetry in a figure; and
2. identify and create figures with at least one line of symmetry.
 |  | 3.11 The student will identify and draw representations of points, lines, line segments, rays, and angles. |  |
|  |  |  |  | 2.13 The student will identify, describe, compare, and contrast plane and solid figures (circles/spheres, squares/cubes, and rectangles/rectangular prisms). |  | 3.12 The student will 1. define polygon;
2. identify and name polygons with 10 or fewer sides; and
3. combine and subdivide polygons with three or four sides and name the resulting polygon(s).
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|  |  |  |  |  |  | 3.13 The student will identify and describe congruent and noncongruent figures. |  |
| ◆ Probability & Statistics |  | **◆ Probability & Statistics** |  | **◆ Probability & Statistics** |  | **◆ Probability & Statistics** |  |
| K.11 The student will 1. collect, organize, and represent data; and
2. read and interpret data in object graphs, picture graphs, and tables.

  |  | 1.12 The student will 1. collect, organize, and represent various forms of data using tables, picture graphs, and object graphs; and
2. read and interpret data displayed in tables, picture graphs, and object graphs, using the vocabulary *more, less, fewer, greater than, less than,* and *equal to*.
 |  | 2.14 The student will use data from probability experiments to predict outcomes when the experiment is repeated. |  | 3.14 The student will investigate and describe the concept of probability as a measurement of chance and list possible outcomes for a single event. |  |
|  |  |  |  | 2.15 The student will 1. collect, organize, and represent data in pictographs and bar graphs; and
2. read and interpret data represented in pictographs and bar graphs.
 |  | 3.15 The student will1. collect, organize, and represent data in pictographs or bar graphs; and
2. read and interpret data represented in pictographs and bar graphs.
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| **Grade K** | **Score** | **Grade 1** | **Score** | **Grade 2** | **Score** | **Grade 3** | **Score** |
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| ◆ Patterns, Functions & Algebra |  | **◆ Patterns, Functions & Algebra** |  | **◆ Patterns, Functions & Algebra** |  | **◆ Patterns, Functions & Algebra** |  |
| K.12 The student will sort and classify objects according to one attribute. |  | 1.13 The student will sort and classify concrete objects according to one or two attributes. |  | 2.16 The student will identify, describe, create, extend, and transfer patterns found in objects, pictures, and numbers. |  | 3.16 The student will identify, describe, create, and extend patterns found in objects, pictures, numbers and tables. |  |
| K.13 The student will identify, describe, extend, create, and transfer repeating patterns. |  | 1.14 The student will identify, describe, extend, create, and transfer growing and repeating patterns. |  | 2.17 The student will demonstrate an understanding of equality through the use of the equal symbol and the use of the not equal symbol. |  | 3.17 The student will create equations to represent equivalent mathematical relationships.  |  |
|  |  | 1.15 The student will demonstrate an understanding of equality through the use of the equal symbol. |  |  |  |  |  |