## RSU 54/MSAD 54 Math Curriculum

Content Area: Math
Grade: Grade K
Unit: Counting and Cardinality
Common Core State Standards Domain: Counting and Cardinality


| Count to tell the |
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| number of objects. |

4.Understand the relationship between the number names and quantities; connect counting to cardinality.

4a.When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

4b. Understand that the last number said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

4c. Understand that each successive number name refers to a quantity that is one larger.
5.Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a

## Count to tell the number of objects.

4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

4b1.Understand that the last number name said tells the number of objects counted.

4 b 2 .Understand that the number of objects is the same regardless of their arrangement or the order in which they were counted.

4c. Understand that each successive number name refers to a quantity that is one larger.

5a. Count to find out "how many" items are in a group of up to 20; produce a collection of items that matches a given number.

4b1. Zeroing in on Numbers and Operations PK to K All About Five
4 b 1 . Zeroing in on Numbers and Operations PK to K
Match It
4b1. Scott Foresman Chapters 3, 4 \& 5
4b2. Zeroing in on Numbers and Operations PK to K I Spy
4b2. Scott Foresman Chapters $3,4 \& 5$
4 b 2 . Zeroing in on Numbers and Operations PK to K Which One?

4c. Zeroing in on Numbers and Operations PK to K
Time to Sing
4c. Scott Foresman Chapters 3, 4 \& 5

5a. Zeroing in on Numbers and Operations PK to K Picture Cards
5a.Zeroing in on Numbers and Operations PK to K
Focus on Numerals
5a. Scott Foresman Chapters $3,4 \& 5$
5a.Navigations Numbers and Operations PK-2 Choose a Number, pp. 16-18


|  |  | Everyday Counts Partner Games Grade K <br> Collect Ten pp. 14-15 <br> Domino Lotto pp. 16-17 <br> Ten Grid Comparing pp. 18-19 <br> Collect 20 pp . 20-21 <br> Quick As You Can pp. 22-23 <br> All in a Row pp. 26-27 <br> Race to $31 \mathrm{pp} .28-29$ <br> Break the Bank pp. 30-31 <br> The Collector pp. 36-37 <br> Teen Match Ups pp. 44-45 <br> RTI Interventions <br> OCM (Oral Counting) <br> 1. OCM Count aloud with others (say the forward number word sequence). <br> 2. OCM Count objects with monitoring. <br> 3. OCM Touch one-say one with peer or adult (one-to-one tagging). Assist as necessary, including holding the student's hand while touching one/saying one. <br> 4. OCM, NIM Student grabs a handful of small objects and then counts to find how many. Given a hundred chart, student places the objects one-by-one on the numbers. <br> 5. OCM, NIM, QDM Using a die with numbers (numbers can vary depending on the skill of the student) and a group of objects, the student rolls the die, says the number, and takes out of the group that many objects. The teacher or another student does the same. Each person should say whether he or she has more or less than the other person. Without putting the objects back, the first student takes another turn (roll, say, count out) and adds the new amount to the first amount. After the second person goes, each determines and then states whether he or she has more or less than the other person. As an extension, the amounts can be lined up side-byside so that the student can determine how many more/less. <br> 6. OCM Count backwards with others (say the backward number word sequence). <br> 7. OCM Count backwards while using a group of objects, removing one each time (perhaps the objects could be arranged onto ten-frames to support the conceptual understanding of teens |
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|  |  | objects and then counts to find how many. Given a hundred chart, student places the objects one-by-one on the numbers. <br> 21. NIM Use a deck of number cards $0-10$ with corresponding quantities shown. Draw a card and ask the student to name it. The student may count the objects if necessary to help name the number. After naming, the student should place the number in a row in order (cards with zero on the left, then ones, etc.). Having the numbers in order may also help the student identify and name the numeral. <br> 22. OCM, NIM, QDM Using a die with numbers (numbers can vary depending on the skill of the student) and a group of objects, the student rolls the die, says the number, and takes out of the group that many objects. The teacher or another student does the same. Each person should say whether he or she has more or less than the other person. Without putting the objects back, the first student takes another turn (roll, say, count out) and adds the new amount to the first amount. After the second person goes, each determines and then states whether he or she has more or less than the other person. As an extension, the amounts can be lined up side-byside so that the student can determine how many more/less. <br> 23. NIM Use a number line and a die labeled 1, 1, 2, $2,3,3$. Student rolls the die and moves that many spaces, starting at zero. After the student finishes moving, he/she says the number. If correct, another turn may be taken. Play as a game. <br> 24. NIM, QDM Say word forms while touching numerals or quantities (connect quantity with number word forms). <br> 25. NIM, QDM Given cards with representations for numbers in the teens, using ten frame cards, put the cards in order from least to greatest. Say the number name for each card while saying the numbers in order. Do the same later with numeral cards. <br> MNM (Missing Number) <br> 26. MNM Fill in missing numbers in sequence, especially using number lines for visual support. |
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|  | 27. MNM Ask student to name the number that <br> comes between two given numbers. This can be <br> done orally, in written form, or by having the <br> student choose the appropriate number card to <br> place between the given number cards. <br> MNM, M-CBM, M-CAP Ask student to find |
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| 28, more or ten less than a number. |  |
| ten mor |  |

## RSU 54/MSAD 54 Math Curriculum

Content Area: Math
Grade: Grade K
Unit: Operations and Algebraic
Common Core State Standards Domain: Operations and Algebraic Thinking






RSU 54/MSAD 54 Math Curriculum
Content Area: Math
Grade: Grade K
Unit: Number and Operations in Base Ten
Common Core State Standards Domain: Number and Operations in Base Ten

| Common Core State Standards | $\begin{gathered} \hline \text { RSU 54/MSAD } 54 \\ \text { Objectives } \\ \hline \end{gathered}$ | Instructional Resources/Activities |
| :---: | :---: | :---: |
| Work with numbers 11-19 to gain foundations for place value. <br> 1.Compose and decompose numbers from 11 to 19 into tens and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by drawing or equation (e.g., 18=10+8); understanding that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | Work with numbers 11-19 to gain foundations for place value. <br> 1a. Given a group or picture of ten objects and additional ones, compose numbers 1119. <br> 1b. Decompose numbers 11-19 by separating into one group of ten and additional ones. <br> 1c. Record compositions and decompositions using drawings or equations. | 1a. Zeroing in on Numbers and Operations PK to K Teen Numbers <br> 1a. Scott Foresman Lessons 5-1, 5-2, 5-3, 5-4 \& 5-5 <br> 1a. Navigations Numbers and Operations PK-2 Flip Two pp. 65-67 |

## RSU 54/MSAD 54 Math Curriculum

Content Area: Math
Grade: Grade K
Unit: Measurement and Data
Common Core State Standards Domain: Measurement and Data

| Common Core State Standards | RSU 54/MSAD 54 Objectives | Instructional Resources/Activities |
| :---: | :---: | :---: |
| Describe and compare measurable attributes. <br> 1.Describe measurable attributes of objects, such as length or weight. Describe several attributes of a single object. | Describe and compare measurable attributes. <br> 1a. Describe measureable attributes of objects such as length, weight or capacity. <br> 1b. Describe several attributes of an object. | 1a. Scott Foresman Chapter 6 <br> 1a. Navigations MeasurementPK-2 Body Balance pp. 14 \& 15 <br> 1a. Navigations Measurement PK-2 Scavenger Hunt pp. 16 \& 17 <br> 1b. Zeroing in on Numbers and Operations PK to K More Less or the Same? <br> 1b. Scott Foresman Chapter 6 <br> 1b. Navigations Measurement PK-2 Scavenger Hunt pp. 16 \& 17 |
| 2. Directly compare two objects with a measurable attribute in common, to see | 2. Compare two objects by length, weight or capacity and describe the difference. | 2. Scott Foresman Chapter 6 <br> 2. Navigations Measurement PK-2 Body Balance pp. 14 \& 15 <br> 2. Navigations Measurement PK-2 Scavenger Hunt pp. 16 \&17 <br> 2. Zeroing in on Numbers and Operations PK to K Feel It <br> 2. Zeroing in on Numbers and Operations PK to K More Less or the Same? <br> 2. Scott Foresman Chapter 6 <br> 2. Navigations Measurement PK-2 Body Balance pp. 14 \& 15 <br> 2. Navigations Measurement PK-2 Scavenger Hunt pp. $16 \& 17$ |
| Classify objects and count the number of objects in each category. <br> 3. Classify objects into given categories; count the number of objects in each category and sort the | Classify objects and count the number of objects in each category. <br> 3a. Collect, arrange and interpret data | 3a. Zeroing in on Numbers and Operations PK to K Number Books <br> 3a. Zeroing in on Numbers and Operations PK to K Graph It <br> 3a. Scott Foresman Lessons 2-1, 2-2, 2-3 \& 2-4 <br> 3a. Navigations Measurement PK-2 Giant Steps, Baby Steps pp. 32 \& 33 |

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\begin{array}{|l|l|l|}\hline \text { categories by count.* } & \begin{array}{l}\text { 3b. Collect data and } \\
\text { organize into a charts, } \\
\text { real graph, picture } \\
\text { *Limit category } \\
\text { counts to be less than } \\
\text { graph, bar graph, line } \\
\text { plot or table }\end{array} & \begin{array}{l}\text { 3b. Zeroing in on Numbers and Operations PK to K } \\
\text { Number Books } \\
\text { 3b. Zeroing in on Numbers and Operations PK to K }\end{array}
$$ <br>
Graph It <br>

3b. Scott Foresman Lessons 2-1, 2-2, 2-3 \& 2-4\end{array}\right]\)| Literature Connections |
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| Rooster's Off to See the World by Eric Carle |
| Much Bigger then Martin by Steven Kellogg |
| Chrysanthemum by Kevin Henkes |

## RSU 54/MSAD 54 Math Curriculum

Content Area: Math
Grade: Grade K
Unit: Geometry
Common Core State Standards Domain: Geometry

| Common Core State Standards | RSU 54/MSAD 54 Objectives | Instructional Resources/Activities |
| :---: | :---: | :---: |
| Identify and describe shapes (squares, circles, rectangles, hexagons, cubes, cones, cylinders, and spheres). | Identify and describe shapes (squares, circles, rectangles, hexagons, cubes, cones, cylinders, and spheres). |  |
| 1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. | 1a. Identify solid shapes in their environment (cubes, cones, cylinders, and spheres) | 1a. Scott Foresman Lesson 8-1, 8-2, 8-3 <br> 1a. Navigations Geometry PK-2 Projector Math pp. 71 \& 72 |
|  | 1b. Identify plane shapes in their environment (squares, circles, rectangles and hexagons) | 1b. Scott Foresman Lesson 8-4, 8-5 <br> 1b. Navigations Geometry PK-2 Projector Math pp. 71 \& 72 |
|  | 1c. Describe the relative position of a plane and solid shape using the terms above, below, beside, in front of, behind, and next to. | 1c. Scott Foresman Lesson 1-1, 1-2, 1-3, 1-4 <br> 1c. Navigations Geometry PK-2 Ins and Outs pp. 33-35 <br> 1c. Navigations Geometry PK-2 Match My Grid pp. 3638 |
|  | 1d. Identify sides and vertices of plane shapes and faces and vertices of solid shapes. | 1d. Scott Foresman Lesson 8-4 (need to extend concept to all shapes) |
| 2. Correctly name shapes regardless of their orientations or overall size. | 2a. Identify shapes after flips, slides and turns (squares, circles, rectangles and | 2a. Scott Foresman Lesson 8-6 |
|  |  | 3a. Investigations Making Shapes and Building Blocks Investigation 1\&3 |

two-dimensional
(lying in a plane,
"flat") or three-
dimensional ("solid").

Analyze, compare, create, and compose shapes.
4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/ "corners") and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

3a. Identify an object as two-dimensional ("flat") or three-dimensional

Analyze, compare, create, and compose shapes.

4a. Analyze and compare the number of sides and vertices/ "corners" and other attributes of two- and three-dimensional shapes

5a. Build two and threedimensional shapes using various materials including drawing.

6a. Make larger shapes out of simple shapes.

4a. Investigations Making Shapes and Building Blocks Investigation 4
4a. Navigations Geometry PK-2 Alike and Different pp. 17 \& 18
4a. Navigations Geometry PK-2 Name that Block pp. 19-21

5a. Scott Foresman Lesson 8-1

6a. Zeroing in on Numbers and Operations PK to K Organize It
6a. Scott Foresman Lesson 8-7
6a. Navigations Geometry PK-2 Shapes from Shapes p.
14-16

## Literature Connections

Captain Invincible and the Space Shapes by Stuart J.
Murphy
The Greedy Triangle by Marilyn Burns

## Games

Everyday Counts Partner Games Grade K
Shape Race pp. 24-25


