Kindergarten Mathematics Scope and Sequence

| Quarter 1 |  |  |
| :---: | :---: | :---: |
| Domain | Counting and Cardinality | Geometry |
| Standard | K.CC. 1 Count to 100 by ones and by tens. <br> K.CC. 2 Count forward within 100 beginning from any given number other than <br> 1. <br> K.CC. 3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). <br> K.CC. 4 Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies. <br> a. When counting objects, establish a one-to-one relationship by saying 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. <br> b. Understand that the last number name said tells the number of objects counted and that the number of objects is the same regardless of the arrangement or the order in which counted. <br> c. Understand that each successive number name refers to a quantity that is one larger. <br> K.CC. 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 scattered configuration; given a number from 1-20, count out that many objects. <br> K.CC. 6 Orally identify (without using inequality symbols) whether the number of objects in one group is greater/more than, less/fewer than, or the same as the number of objects in another group, not to exceed 10 objects in each group. | K.G. 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. <br> K.G. 2 Correctly name shapes regardless of their orientations or overall size. <br> K.G. 5 Model shapes in the world by building shapes from components (such as sticks and clay balls) and drawing shapes. |
| Resource | Bridges - Unit 1, 2, 3 | Bridges - Unit 2 |


| Quarter 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Domain | Counting and Cardinality | Numbers in Base Ten | Measurement and Data | Geometry |
| Standard | K.CC. 1 Count to 100 by ones and by tens. <br> K.CC. 2 Count forward within 100 beginning from any given number other than 1. <br> K.CC. 3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). <br> K.CC. 4 Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies. <br> a. When counting objects, establish a one-to-one relationship by saying 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. <br> b. Understand that the last number name said tells the number of objects counted and that the number of objects is the same regardless of the arrangement or the order in which counted. <br> c. Understand that each successive number name refers to a quantity that is one larger. <br> K.CC. 5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a | K.NBT. 1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | K.MD. 1 Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short. <br> K.MD. 2 Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute, and describe the difference. For example, directly compare the heights of two children, and describe one child as taller/shorter. | K.G. 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. <br> K.G. 2 Correctly name shapes regardless of their orientations or overall size. <br> K.G. 3 Identify shapes as twodimensional (lying in a plane, "flat") or three-dimensional ("solid"). <br> K.G. 4 Describe and compare two- or three-dimensional shapes, in different sizes and orientations, using informal language to describe their commonalities, differences, parts, and other attributes. <br> K.G. 5 Model shapes in the world by building shapes from components, e.g., sticks and clay balls, and drawing shapes. |


|  | rectangular array, or a circle, or as <br> many as 10 things in a scattered <br> configuration; given a number from <br> $1-20$, count out that many objects. |  |  |  |
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|  | K.CC.6 Orally identify (without using <br> inequality symbols) whether the <br> number of objects in one group is <br> greater/more than, less/fewer than, <br> or the same as the number of <br> objects in another group, not to <br> exceed 10 objects in each group. |  | Bridges - Unit 4 |  |
| Resource | Bridges - Unit 3, 4,5 |  |  |  |


| Quarter 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Domain | Counting and Cardinality | Operations and Algebraic Thinking | Numbers in Base Ten | Measurement and Data |
| Standard | K.CC. 1 Count to 100 by ones and by tens. <br> K.CC. 3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). <br> K.CC. 4 Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies. <br> a. When counting objects, establish a one-to-one relationship by saying 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. <br> b. Understand that the last number name said tells the number of objects counted and that the number of objects is the same regardless of the arrangement or the order in which counted. <br> c. Understand that each successive number name refers to a quantity that is one larger. <br> K.CC. 7 Compare (without using inequality symbols) two numbers between 0 and 10 when presented as written numerals. | K.OA. 1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds such as claps, acting out situations, verbal explanations, expressions, or equations. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.) <br> K.OA. 2 Solve addition and subtraction problems (written or oral), and add and subtract within 10 by using objects or drawings to represent the problem. <br> K.OA. 4 For any number from 1 to 9 , find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or, when appropriate, an equation. <br> K.OA. 5 Fluently add and subtract within 5. | K.NBT. 1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | K.MD. 3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. The number of objects in each category should be less than or equal to ten. Counting and sorting coins should be limited to pennies. |
| Resource | Bridges - Unit 6, 7 | Bridges - Unit 5, 6 | Bridges - Unit 6 | Bridges - Unit 4, 6 |


| Quarter 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Domain | Counting and Cardinality | Operations and Algebraic Thinking | Numbers in Base Ten | Measurement and Data | Geometry |
| Standard | K.CC. 1 Count to 100 by ones and by tens. <br> K.CC. 3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). | K.OA. 1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds such as claps, acting out situations, verbal explanations, expressions, or equations. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.) <br> K.OA. 2 Solve addition and subtraction problems (written or oral), and add and subtract within 10 by using objects or drawings to represent the problem. <br> K.OA. 3 Decompose numbers and record compositions for numbers less than or equal to 10 into pairs in more than one way by using objects and, when appropriate, drawings or equations. <br> K.OA. 4 For any number from 1 to 9 , find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or, when appropriate, an equation. <br> K.OA. 5 Fluently add and subtract within 5. | K.NBT. 1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | K.MD. 1 Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short. <br> K.MD. 2 Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute, and describe the difference. For example, directly compare the heights of two children, and describe one child as taller/shorter. | K.G. 6 Combine simple shapes to form larger shapes |
| Resource | Bridges - Unit 7,8 | Bridges - Unit 7,8 | Bridges - Unit 7,8 | Bridges - Unit 7, 8 | Bridges - Unit 5 |


| Quarter 1 Learning Targets |  |  |
| :---: | :---: | :---: |
| Ohio Standard | Learning Targets | Notes |
| K.CC. 1 | Count to 20 by ones. |  |
| K.CC. 2 | Count forward to 10 starting with numbers other than 1. |  |
| K.CC. 3 | Write numerals from 0-10. |  |
| K.CC. 4 | Establish a one-to-one relationship when counting by saying the number names in standard order, paring each object with one and only one number name and each number name with one and only one object with up to 10 objects. |  |
|  | Understand that the last number said tells the number of objects counted and that the number of objects is the same regardless of the arrangement or order in which counted. (up to 10) |  |
| K.CC. 5 | Count to answer "how many" questions about as many as 10 things arranged in a line, rectangular array, circle, or as scattered in a configuration. |  |
|  | Given a number from 1-10 count out that many objects. |  |
| K.G. 1 | Describe two-dimensional objects in the environment using names of shapes. |  |
|  | Describe the relative position of two-dimensional shapes in the environment using terms such as above, below, beside, in front of, behind, next to. |  |
| K.G. 2 | Correctly name two-dimensional shapes regardless of their orientation or overall size. |  |
| K.G. 5 | Model two-dimensional shapes in the world by building shapes from components and drawing shapes. |  |

${ }^{1}$ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery


| K.G. 4 | Compare two or three-dimensional shapes in different sizes and orientations, using informal language to describe their commonalities, differences, parts and other attributes. |  |
| :---: | :---: | :---: |
| K.G. 5 | Model three-dimensional shapes in the world by building shapes from components and drawing shapes. |  |
| K.MD. 1 | Identify measurable attributes (length, height) of a single object using vocabulary terms such as long/short or tall/short. |  |
|  | Describes measurable attributes (length, height) of a single object using vocabulary terms such as long/short or tall/short. |  |
| K.MD. 2 | Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less than" attribute. (Length \& Height) |  |
|  | Describe the difference between two objects with a common attribute. (Length \& Height) |  |
| K.NBT. 1 | (Introductory) Compose and decompose numbers from 11-19 into a group of tens ones and some further ones by using objects, drawings, equations. | Not expected to be mastered in this quarter; introduction to ones and tens with base ten blocks and terminology; mastery expected by end of quarter 4 |

${ }^{1}$ Instructional Focus recommended by the ODE's Mathematics Model Curriculum; Learning Target needed for complete standard mastery

| Quarter 3 Learning Targets |  |  |
| :---: | :---: | :---: |
| Ohio Standard | Learning Targets |  |
| K.CC. 1 | Count to 60 by ones. |  |
|  | Count to 100 by tens. |  |
| K.CC. 2 | Count forward to 52 starting with numbers other than 1. |  |
| K.CC. 3 | Write numerals 0-20. |  |
| K.CC. 4 | Understand that each successive number name refers to a quantity that is one larger. <br> - Name the number that is one more than the group showed. <br> - Find and create a group that is one more than the group showed. |  |
| K.CC. 7 | Compare two numbers between 0 and 10 when presented as written numerals (without using inequality symbols). |  |
| K.MD. 3 | Classify objects into given categories | Not expected to be mastered in this quarter; introduction to ones and tens with base ten blocks and terminology; mastery expected by end of quarter 4 |
|  | Count the number of objects in each category and sort the categories by count. (less than or equal to 10 in each category, coin sorting should be limited to pennies) |  |
| K.NBT. 1 | (Introductory) Compose and decompose numbers from 11-19 into a group of tens ones and some further ones by using objects, drawings, equations. |  |
|  | (Introductory) Understand that numbers are composed of a group of ten ones and one, two, tree, four, five, six, seven, eight, or nine ones. |  |
| K.OA. 1 | (Introductory) Represent addition in a variety of ways. <br> - Scholars can represent by fingers, mental images, drawings, and sounds such as claps, acting out situations, verbal explanations, expressions, or equations. | Mastery expected in Quarter 4 |
|  | (Introductory) Represent subtraction in a variety of ways. <br> - Scholars can represent by fingers, mental images, drawings, and sounds such as claps, acting out situations, verbal explanations, expressions, or equations. | Mastery expected in Quarter 4 |
| K.OA. 2 | (Introductory) Solve addition problems. | Mastery expected in Quarter 4; see appendix A, Table 1 for examples of problem types |
|  | (Introductory) Add within 10 by using objects or drawings to represent the problem. |  |
|  | (Introductory) Solve subtraction problems. |  |
|  | (Introductory) Subtract within 10 by using objects or drawings to represent the problem. |  |
| K.OA. 4 | (Introductory) For any number from 1 to 9 , find the number that makes 10 when added to the given number by using objects or drawings and record the answer with a drawing or an equation. |  |
| K.OA. 5 | (Introductory) Fluently add within 5. | Mastery expected in Quarter 4 |
|  | (Introductory) Fluently subtract within 5. |  |


| Quarter 4 Learning Targets |  |  |
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| $\begin{aligned} & \text { Ohio } \\ & \text { Standard } \end{aligned}$ | Learning Targets | Notes |
| K.CC. 1 | Count to 100 by ones. |  |
| K.cc. 2 | Count forward to 100 starting with numbers other than 1. |  |
| K.CC. 3 | Represent a number of objects with a written numeral 0-20. |  |
| K.G. 6 | Combine simple shapes to form larger shapes. |  |
| K.NBT. 1 | Compose and decompose numbers from 11-19 into a group of tens ones and some further ones by using objects, drawings, equations. |  |
|  | Understand that numbers are composed of a group of ten ones and one, two, tree, four, five, six, seven, eight, or nine ones. |  |
|  | Explore the structure of teen numbers to recognize a pattern. ${ }^{1}$ |  |
| K.OA. 1 | Represent addition in a variety of ways. <br> - Scholars can represent by fingers, mental images, drawings, and sounds such as claps, acting out situations, verbal explanations, expressions, or equations. |  |
|  | Represent subtraction in a variety of ways. <br> - Scholars can represent by fingers, mental images, drawings, and sounds such as claps, acting out situations, verbal explanations, expressions, or equations. |  |
| K.OA. 2 | Solve addition problems. | Mastery expected in Quarter 4; see appendix A, Table 1 for examples of problem types |
|  | Add within 10 by using objects or drawings to represent the problem. |  |
|  | Solve subtraction problems and subtract within 10 by using objects or drawings to represent the problem. |  |
|  | Subtract within 10 by using objects or drawings to represent the problem. |  |
| K.OA. 3 | Decompose numbers and record compositions for numbers less than or equal to 10 into pairs in more than one way by using objects, drawings, or equations. |  |
| K.OA. 4 | For any number from 1 to 9 , find the number that makes 10 when added to the given number by using objects or drawings and record the answer with a drawing or an equation. |  |
| K.OA. 5 | Fluently add within 5. |  |
|  | Fluently subtract within 5. |  |
| K.MD. 1 | Identify measurable attributes (weight) of a single object using vocabulary terms such as heavy/light. |  |
|  | Describes measurable attributes (weight) of a single object using vocabulary terms such as heavy/light. |  |
| K.MD. 2 | Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less than" attribute. (Weight) |  |
|  | Describe the difference between two objects with a common attribute. (Weight) |  |

