***Murray County Schools***

A close up of a sign

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***Kindergarten Math Pacing Guide***

***2019-2020***

* Thoughtful and effective ***planning*** throughout the school year is crucial for student mastery of standards.
* Once a standard is introduced, it is understood that the standard is continuously taught and/or reviewed throughout the entire

school year.

* Some standards appear in multiple grading periods. The bulleted section typed below the standard is the portion of the standard that students should master in that time frame.

**Standards for Mathematical Practice**

1. **Make sense of problems and persevere in solving them. 5. Use appropriate tools strategically.**
2. **Reason abstractly and quantitatively. 6. Attend to precision**
3. **Construct viable arguments and critique the reasoning of others. 7. Look for and make use of structure.**
4. **Model with Math 8. Look for and express regularity in repeated reasoning.**

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| **First Eight Weeks** | **Second Eight Weeks** | **Third Eight Weeks** | **Fourth Eight Weeks** |
| **Counting and Cardinality**  **1:** Count to 100 by ones and by tens.  **MGSEK.CC.3:** Write numbers from 0-20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).  **MGSEK.CC.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.  **MGSEK.CC.4b:** Understand that the last number name 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.  **MGSEK.CC.4c:** Understand that each successive number name refers to a quantity that is one larger.  **MGSEK.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.  **Operations and Algebraic Thinking**  **MGSEK.OA.1:** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., 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.)  **MGSEK.OA.2:** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.  **Geometry**  **MGSEK.G.2:** Correctly name shapes regardless of their orientations or overall size.  **MGSEK.G.3:** Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”). | **Counting and Cardinality**  **MGSEK.CC.1:** Count to 100 by ones and by tens.  **MGSEK.CC.3:** Write numbers from 0-20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).  **MGSEK.CC.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.  **MGSEK.CC.4b:** Understand that the last number name 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.  **MGSEK.CC.6**: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)  **MGSEK.CC.7**: Compare two numbers between 1 and 10 presented as written numerals.  **Operations and Algebraic Thinking**  **MGSEK.OA.5:** Fluently add and subtract within 5.  **Geometry**  **MGSEK.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.  **MGSEK.G.2:** Correctly name shapes regardless of their orientations or overall size.  **MGSEK.G.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 or “corners”), and other attributes (e.g., having sides of equal length).  **MGSEK.G.5:** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. | **Counting and Cardinality**  **MGSEK.CC.1:** Count to 100 by ones and by tens.  **MGSEK.CC.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1).  **MGSEK.CC.3:** Write numbers from 0-20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).  **MGSEK.CC.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.  **MGSEK.CC.4b:** Understand that the last number name said tells the number of objects counted. 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Describe several measurable attributes of a single object.  **MGSEK.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. Example: Directly compares height of two children, and describes one child as taller or shorter.  **MGSEK.MD.3:** Classify objects into given categories; count the number of objects in each category, and sort the categories by count. (Limit category counts to be less than or equal to 10.)  **Geometry**  **MGSEK.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.  **MGSEK.G.2:** Correctly name shapes regardless of their orientations or overall size.  **MGSEK.G.3:** Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).  **MGSEK.G.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 or “corners”), and other attributes (e.g., having sides of equal length).  **MGSEK.G.5:** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. | **Counting and Cardinality**  **MGSEK.CC.1:** Count to 100 by ones and by tens.  **MGSEK.CC.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1).  **MGSEK.CC.3:** Write numbers from 0-20. 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Example: Directly compares height of two children, and describes one child as taller or shorter.  **Geometry**  **MGSEK.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.  **MGSEK.G.3:** Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).  **MGSEK.G.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 or “corners”), and other attributes (e.g., having sides of equal length).  **MGSEK.G.5:** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.  **MGSEK.G.6:** Compose simple shapes to form larger shapes. Example: “Can you join these two triangles with full sides touching to make a rectangle?” |

***Academic Vocabulary***

**Academic language** is the specialized vocabulary associated with instruction and mastery of academic content and tasks. The words listed below reflect the ***minimum*** vocabulary necessary for students to become proficient with grade-level standards.

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| **First Eight Weeks** | **Second Eight Weeks** | **Third Eight Weeks** | **Fourth Eight Weeks** |
| **Counting & Cardinality**   * Count * Number * Before * After   **Measurement & Data**   * Weight * Heavier * Lighter * Longer * Shorter * Tall * Length * Measure * Size * Attribute   **Geometry**   * Shapes * Circle * Rectangle * Square * Triangle * Hexagon * Octagon | **Counting & Cardinality**   * Count * Number * Equal   **Measurement & Data**   * Attribute * Size * Category * Sort   **Geometry**   * Two-Dimensional * Shapes * Above * Below * Beside * In font of * Behind * Next to | **Counting & Cardinality**   * Count * Number * More * Less * Greater than * Less than   **Operations & Algebraic Thinking**   * Add * Addition * Plus Sign * Equal Sign * Join * Sum   **Measurement & Data**   * Sort * Count * Category * Compare * Classify   **Geometry**   * Three Dimensional * Shapes * Cone * Cylinder * Sphere * Cube | **Operations & Algebraic Thinking**   * Subtract * Subtraction * Difference * Ten Frame   **Number & Operations in Base Ten**   * Compose * Decompose * Tens Place * Ones Place * Equation * Double ten frame   **Geometry**   * Two Dimensional * Three Dimensional * Shapes * Sides * Vertices * Corners * Face * Edge |