Kindergarten Math Curriculum Map

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| **Unit & Time Frame** | **Standards** | **Essential**  **Questions** | **Content** | **Student Learning Objectives (Skills)** | **Assessment** |
| **Unit 1:** Number Names and Count Sequences  Time Frame:   * 5 weeks of instruction * 2 weeks of assessment and remediation | **K.CC.1**- Count to 100 by ones and tens  **K.CC.3**- Write numbers for 0-20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).  K.CC.4- Understand the relationship between numbers and quantities; connect counting to cardinality.   * 1. 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.   2. 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.   Understand that each successive number name refers to a quantity that is one larger.  **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.  K.OA.1- Understand addition as putting together and adding to, and subtraction as taking apart and taking from. | · Why do we count?  · How do you count from 1-10?  · How do you write 0-10 using numbers?  · How can you represent a number with a group of objects?  · How can you use two sets of objects to show a number in more than one way?  · What happens when we combine groups of objects?  · What happens when we take groups of objects apart? | · Count to 10  · Represent groups of objects with numerals  · Assign numbers while counting  · Add and subtract using manipulatives  · Count objects in a group | · Students will be able to count to 10 by ones.  · Students will be able to represent a number of objects with the correct numeral up to 5.  · Students will be able to assign a number name to each object when counting a group of objects.  · Students will be able to use manipulatives to represent addition and subtraction problems up to 10.  · Students will be able to answer "how many" questions when counting groups of objects up to 10 arranged in a line or in a scattered configuration. | Formative Assessments:   * Teacher observation * Center work * Homework   Summative Assessments:   * Unit 1 State Assessment |
| **Unit 2:** Addition as “adding to” and Subtraction as “taking from”  Time Frame:   * 5 weeks of instruction * 2 weeks of assessment and remediation | **K.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).  **K.CC.1**- Count to 100 by ones and tens.  K.CC.2- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).  K.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.  **K.OA.5**- Fluently add and subtract within 5.  K.MD.3- Classify objects into given categories; count the number of objects in each category and sort the categories by count. | · Why do we count?  · Does counting always begin at 1?  · How do you write 0-20 using numbers?  · What strategies can we use to solve number stories?  · What happens when we combine groups of objects?  · What happens when we take groups of objects apart?  · How can we sort and classify objects? | · Count objects and represent with a numeral  · Write numbers 0-10  · Count to 30  · Begin counting at numbers other than one  · Add and subtract using manipulatives  · Add and subtract mentally  · Classify and sort objects | · Students will be able to count and represent with a written numeral a number of objects to 10.  · Students will be able to write numerals from zero to 10.  · Students will be able to count to 30 by ones and tens.  · Students will be able to count forward beginning from any given number up to 50— instead of having to begin at one.  · Students will be able to use objects or drawings to represent and solve addition and subtraction word problems within 10.  · Students will be able to fluently add within 5.  · Students will be able to classify and sort objects into given categories and count the objects in each category (up to 10 objects). | Formative Assessments:   * Teacher observation * Center work * Homework   Summative Assessments:   * Unit 2 State Assessment |
| **Unit 3:** Compare Numbers and Shapes  Time Frame:   * 5 weeks of instruction * 2 weeks of assessment and remediation | **K.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).  **K.CC.1 –** Count to 100 by ones and tens.  K.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.1.  K.CC.7 – Compare two numbers between 1 and 10 presented as written numerals.  K.MD.1 Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.  K.MD.2 – Directly compare two objects with a measureable attribute in common, to see which has “more of”/ “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.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). | · Why do we count?  · Does counting always begin at 1?  · How do you write 0-20 using numbers?  · What strategies can we use to solve number stories?  · What happens when we combine groups of objects?  · What happens when we take groups of objects apart?  · Why do we measure things?  · What materials can be used to measure?  · How do we measure objects?  · How do you know when a group of objects is greater than, less than, or equal to another. | · Count objects and represent with a numeral  ·Write numbers to 20    · Count to 50  · Compare objects and numbers  · Measure objects by length and weight  · Compare two and three dimensional shapes | · Students will be able to count and represent with a written numeral a number of objects to 20.  · Students will be able to write numerals 0-20.  · Students will be able to count to 50 by ones and tens.  · Students will be able to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (groups of up to 10 objects).  · Students will be able to compare numbers (up to 10) written as numerals.  · Students will be able to describe measurable attributes of objects (i.e. length and weight).  · Students will be able to directly compare and describe two objects with a measurable attribute in common using “more of/less of” the attribute.  · Students will be able to analyze and compare two and three-dimensional shapes in different sizes and orientations by counting sides or vertices or comparing attributes such as side lengths. | Formative Assessments:   * Teacher observation * Center work * Homework   Summative Assessments:   * Unit 3 State Assessment |
| **Unit 4:** Foundations for Place Value  Time Frame:   * 5 weeks of instruction * 2 weeks of assessment and remediation | **K.CC.1**- Count to 100 by ones and tens.  K.OA.3- Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition by a drawing or equation (e.g. 5=2+3 and 5=1+4).  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 equation.  **K.OA.5**- Fluently add and subtract within 5.  K.NBT.1- Compose and decompose numbers from 11 to 19 into tens and ones by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18=10+8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | · Why do we count?  · Does counting always begin at 1?  · How do you write 0-20 using numbers?  · What strategies can we use to solve number stories?  · What happens when we combine groups of objects?  · What happens when we take groups of objects apart?  · How can you represent a number (0-10) in different ways?  · How can you represent a teen number using tens and ones? | · Count to 70  · Compose and decompose teen numbers  · Making 10 | · Students will be able to count orally to 70 by ones and tens.  · Students will be able to decompose numbers, less than or equal to ten into pairs of numbers in more than one way and record with a drawing or equations (e.g., write 7 as 2+5 and 6+1).  · Students will be able to decompose numbers 11-19 into a group of tens and one(s) with or without manipulatives and record using a drawing or equation.  · Students will be able to find a number that makes 10 when given a number less than 10 (e.g., 1+9, 2+8, 3+7, 4+6, etc).  · Students will be able to use mental math strategies to solve addition and subtraction facts within 5. | Formative Assessments:   * Teacher observation * Center work * Homework   Summative Assessments:   * Unit 4 State Assessment |
| **Unit 5:** Geometric Shapes  Time Frame:   * 5 weeks of instruction * 2 weeks of assessment and remediation | **K.CC.1**- Count to 100 by ones and tens.  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, and next to.  K.G.2- Correctly name shapes regardless of their orientations or overall size.  K.G.3- Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).  K.G.5- Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.  K.G.6- Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?” | · Why do we count?  · Does counting always begin at 1?  · How are two-dimensional and three-dimensional shapes different?  · Where can shapes be found?  · How can you describe the position of a shape?  · | · Count to 100  · Name two-dimensional and three-dimensional shapes  · Describe positions of shapes  · Classify shapes by dimension  · Build two and three dimensional shapes  · Join smaller shapes to form new shapes | · Students will be able to count to 100 by ones and tens.  · Students will be able to 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.  · Students will be able to correctly name shapes regardless of their orientations or overall size.  · Students will be able to identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).  · Students will be able to model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.  · Students will be able to compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?” | Formative Assessments:   * Teacher observation * Center work * Homework   Summative Assessments:   * Unit 5 State Assessment |