Curriculum Mapping

4/22/2013

Curriculum Map: **2012-2013 Mathematics Common Core State Standards Kindergarten**

Q1 (8/14/2012-10/12/2012)

Content/Concept

Mathematical Practices

Guiding Questions

What best practices are you using for this math lesson?

Skills

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

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Mathematical Practices: 1, 2, 3, 4, 5, 6, 7, 8

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 1)

Guiding Questions

Can you count by 1's to 20?
Can you count by 1's to 50?
Can you count by 10's to 100?
Can you count by 1's to 20 when given a starting number?
Can you write numerals 0-10?
Can you write numerals 11-20?
Can you write a numeral for the number of objects you counted (0-10)?
Can you write a numeral for the number of objects you counted (11-20)?

Skills

Know number names and the count sequence.
1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.1, K.CC.2, K.CC.3

Assessments

Checklists, Observations, Teacher Created Assessments

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 2)

Guiding Questions

Curriculum Mapping

4/22/2013

Can you say the number as you count each object?
Can you tell that the last number you say tells how many objects you counted?
Can you tell that the number of objects counted is the same regardless of their arrangement?
Can you count objects (0-20) presented in at least two different ways (a line, a rectangular array, or a circle)?
Can you count objects (0-10) in a scattered configuration?
Can you count out manipulatives for a given number (0-10)?
Can you count out manipulatives for a given number (11-20)?

Skills

Count to tell the numbers of objects.
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
a. 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.
b. 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.
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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: , K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 2)

Guiding Questions

Can you sort objects?
Can you count the objects in the group you sorted?
Can you sort the categories by count (e.g., Which group has the least/most?)

Skills

Classify objects and count the number of objects in each category.
3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 1)

Guiding Questions

Can you describe things around you using names of two-dimensional shapes?
Can you describe things around you using names of three-dimensional shapes?
Can you use positional words to tell where an object is located (above, below, beside, in front of, behind, and next to)?

Skills

Identify and describe shapes (squares, circles, triangles, 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.
2. Correctly name shapes regardless of their orientations or overall size.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.1, K.G.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Curriculum Mapping

4/22/2013

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 3)

Guiding Questions

Can you identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group?
Can you compare two numbers 1-10 and tell which is greater, which is less, and if they are equal?

Skills

Compare numbers.
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.
7. Compare two numbers between 1 and 10 presented as written numerals.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.6, K.CC.7

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Operations and Algebraic Thinking

Guiding Questions

Can you identify the number that makes 10 when added to a given number from 1-9 by using objects or drawings?
Can you identify the number that makes 10 when added to a given number from 1-9 by recording the answer with an equation?

Skills

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
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 equation.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.OA, , K.OA.4

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Number and Operations in Base Ten

Guiding Questions

Can you put together teen numbers into tens and ones and show your work with objects or drawings?

Skills

Work with numbers 11-19 to gain foundations for place value.
1. Compose and decompose numbers from 11 to 19 into ten, ones and some further ones, e.g., 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.NBT, , K.NBT.1

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Curriculum Mapping

4/22/2013

Content/Concept

Measurement and Data (Cluster 1)

Guiding Questions

Can you tell different ways to measure objects?
Can you describe an object by its measurable attributes?
Can you compare and describe two objects to see which has more of/less of an attribute (e.g., heavier/lighter, taller/shorter)?

Skills

Describe and compare measurable attributes.
1. Describe measurable attributes of objects, such as length or weight.
Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.1, K.MD.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 2)

Guiding Questions

Can you tell how two-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you use different materials to build objects that I see around you?
Can you draw shapes to represent objects you see around you?
Can you use simple shapes to make a larger, new shape?

Skills

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?"

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.4, K.G.5, K.G.6

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Curriculum Mapping

4/22/2013

Q2 (10/15/2012-12/21/2012)

Content/Concept

Mathematical Practices

Guiding Questions

What best practices are you using for this math lesson?

Skills

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

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Mathematical Practices: 1, 2, 3, 4, 5, 6, 7, 8

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 1)

Guiding Questions

Can you count by 1's to 50?
Can you count by 1's to 100?
Can you count by 10's to 100?
Can you count by 1's within 20 when given a starting number?
Can you count by 1's within 50 when given a starting number?
Can you count by 1's within 100 when given a starting number?
Can you write numerals 11-20?
Can you write a numeral for the number of objects you counted (11-20)?

Skills

Know number names and the count sequence.
1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.1, K.CC.2, K.CC.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 2)

Guiding Questions

Can you say the number as you count each object?
Can you tell that the last number you say tells how many objects you counted?
Can you tell that the number of objects counted is the same regardless of their arrangement?
Can you count a group of objects and tell what one more is without having to recount the set?
Can you count objects (0-20) presented in at least two different ways (a line, a rectangular array, or a circle)?
Can you count objects (0-10) in a scattered configuration?
Can you count out manipulatives for a given number (11-20)?

Skills

Curriculum Mapping

4/22/2013

Count to tell the number of objects.
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number with one and only one object.
b. 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.
c. 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 scattered configuration; given a number from 1-20, count out that many objects.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Operations and Algebraic Thinking

Guiding Questions

Can you interpret addition story problems with manipulatives, drawings, verbal explanations, or equations?
Can you solve addition word problems within 10 using objects or drawings?
Can you use objects or drawings to break apart numbers 1-10 into two sets in more than one way?
Can you identify the number that makes 10 when added to a given number from 1-9 by using objects or drawings?
Can you identify the number that makes 10 when added to a given number from 1-9 by recording the answer with an equation?
Can you add the numbers 0-5 quickly and correctly?

Skills

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by drawing or equation (e.g., 5= 2 + 3 and 5= 4 + 1).
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 equation.
5. Fluently add and subtract within 5.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.OA, , K.OA.1, K.OA.2, K.OA.3, K.OA.4, K.OA.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 1)

Guiding Questions

Can you describe things around you using names of three-dimensional shapes?
Can you use positional words to tell where an object is located (above, below, beside, in front of, behind, and next to)?
Can you identify shapes as two-dimensional ("flat") or three-dimensional ("solid")?

Skills

Identify and describe shapes (squares, circles, triangles, 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.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.1, K.G.2, K.G.3

Curriculum Mapping

4/22/2013

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 3)

Guiding Questions

Can you identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group?
Can you compare two numbers 1-10 and tell which is greater, which is less, and if they are equal?

Skills

Compare numbers.
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.
7. Compare two numbers between 1 and 10 presented as written numerals.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.6, K.CC.7

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Number and Operations in Base Ten

Guiding Questions

Can you put together teen numbers into tens and ones and show your work with objects or drawings?
Can you put together teen numbers into tens and ones and show your work with equations (e.g. 10+8=18)?
Can you take apart numbers 11-19 into tens and ones and show your work with a drawing or objects?

Skills

Work with numbers 11-19 to gain foundations for place value.
1. Compose and decompose numbers from 11 to 19 into ten, ones and some further ones, e.g., 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.NBT, , K.NBT.1

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 1)

Guiding Questions

Can you tell different ways to measure objects?
Can you describe an object by its measurable attributes?
Can you compare and describe two objects to see which has more of/less of an attribute (e.g., heavier/lighter, taller/shorter)?

Skills

Describe and compare measurable attributes.
1. Describe measurable attributes of objects, such as length or weight.
Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object 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.

Common Core

Curriculum Mapping

4/22/2013

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.1, K.MD.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 2)

Guiding Questions

Can you count the objects in the groups you sorted?
Can you sort the categories by count (e.g., Which group has the most/least?)?

Skills

Classify objects and count the number of objects in each category.
3. Classify objects into given categories; count the number of objects in each category and sort the categories by count.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 2)

Guiding Questions

Can you tell how two-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you tell how three-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you use different materials to build objects that I see around you?
Can you draw shapes to represent objects you see around you?
Can you use simple shapes to make a larger, new shape?

Skills

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?"

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.4, K.G.5, K.G.6

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Curriculum Mapping

4/22/2013

Q3 (1/7/2013-3/8/2013)

Content/Concept

Mathematical Practices

Guiding Questions

What best practices are you using in this math lesson?

Skills

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

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Mathematical Practices: 1, 2, 3, 4, 5, 6, 7, 8

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 1)

Guiding Questions

Can you count by 1's to 100?
Can you count by 10's to 100?
Can you count by 1's to 50 when given a starting number?
Can you count by 1's to 100 when given a starting number?

Skills

Know number names and the count sequence.
1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects)?

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.1, K.CC.2, K.CC.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 2)

Guiding Questions

Can you tell that the last number you say tells how many objects you counted?
Can you tell that the number of objects counted is the same regardless of their arrangement?
Can you count objects (0-20) presented in at least two different ways (a line, a rectangular array, or a circle)?
Can you count out manipulatives for a given number (11-20)?
Can you count a group of objects and tell what one more is without having to recount the set?

Skills

Curriculum Mapping

4/22/2013

Count to tell the number of objects.
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number with one and only one object.
b. 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.
c. 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 scattered configuration; given a number from 1-20, count out that many objects.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 3)

Guiding Questions

Can you identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group?
Can you compare two numbers 1-10 and tell which is greater, which is less, and if they are equal?

Skills

Compare numbers.
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.
7. Compare two numbers between 1 and 10 presented as written numerals.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.6, K.CC.7

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Operations and Algebraic Thinking

Guiding Questions

Can you interpret addition story problems with manipulatives, drawings, verbal explanations, or equations?
Can you interpret subtraction story problems with manipulatives, drawings, verbal explanations, or equations?
Can you solve addition word problems within 10 using objects or drawings?
Can you solve subtraction word problems within 10 using objects or drawings?
Can you use objects or drawings to break apart numbers 1-10 into two sets in more than one way?
Can you break apart numbers 1-10 using various drawings or equations (e.g., 5=2=3 and 5=4+1)?
Can you find the number that makes 10 when added to any given number 1-9, e.g., by using objects or drawings, and record the answer with a drawing or equation?
Can you add the numbers 0-5 quickly and correctly?
Can you subtract the numbers 0-5 quickly and correctly?

Skills

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by drawing or equation (e.g., 5= 2 + 3 and 5= 4 + 1).
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 equation.
5. Fluently add and subtract within 5.

Common Core

Curriculum Mapping

4/22/2013

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.OA, , K.OA.2, K.OA.3, K.OA.1, K.OA.4, K.OA.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Number and Operations in Base Ten

Guiding Questions

Can you put together teen numbers into tens and ones and show your work with equations (e.g. 10+8=18)?
Can you take apart numbers 11-19 into tens and ones and show your work with a drawing or objects?
Can you take apart numbers 11-19 into tens and ones and show your work with an equation (e.g. 10+8=18)?

Skills

Work with numbers 11-19 to gain foundations for place value.
1. Compose and decompose numbers from 11 to 19 into ten, ones and some further ones, e.g., 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.NBT, , K.NBT.1

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 1)

Guiding Questions

Can you tell different ways to measure objects?
Can you describe an object by its measurable attributes?
Can you compare and describe two objects to see which has more of/less of an attribute (e.g., heavier/lighter, taller/shorter)?

Skills

Describe and compare measurable attributes.
1. Describe measurable attributes of objects, such as length or weight.
Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.1, K.MD.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 1)

Guiding Questions

Can you describe things around you using names of three-dimensional shapes?
Can you use positional words to tell where an object is located (above, below, beside, in front of, behind, and next to)?
Can you identify shapes as two-dimensional ("flat") or three-dimensional ("solid")?

Skills

Curriculum Mapping

4/22/2013

Identify and describe shapes (squares, circles, triangles, 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.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.1, K.G.2, K.G.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 2)

Guiding Questions

Can you tell how three-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you use different materials to build objects that I see around you?
Can you draw shapes to represent objects you see around you?
Can you use simple shapes to make a larger, new shape?

Skills

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?"

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.4, K.G.5, K.G.6

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 2)

Guiding Questions

Can you classify objects into categories and count and sort objects in each category?

Skills

Classify objects and count the number of objects in each category.
3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Curriculum Mapping

4/22/2013

Q4 (3/11/2013-5/22/2013)

Content/Concept

Mathematical Practices

Guiding Questions

What best practices are you using in this math lesson?

Skills

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

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Mathematical Practices: 1, 2, 3, 4, 5, 6, 7, 8

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 1)

Guiding Questions

Can you count by 1's to 100?

Skills

Know number names and the count sequence.
1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.1, K.CC.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 2)

Guiding Questions

Can you count objects (0-20) presented in at least two different ways (a line, a rectangular array, or a circle)?
Can you count objects (0-10) in a scattered configuration?
Can you count out manipulatives for a given number (11-20)?

Skills

Count to tell the number of objects.
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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.5

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Curriculum Mapping

4/22/2013

Activities/ Lesson Plans

Content/Concept

Operations and Algebraic Thinking

Guiding Questions

Can you interpret addition story problems with manipulatives, drawings, verbal explanations, or equations?
Can you interpret subtraction story problems with manipulatives, drawings, verbal explanations, or equations?
Can you solve addition word problems within 10 using objects or drawings?
Can you solve subtraction word problems within 10 using objects or drawings?
Can you use objects or drawings to break apart numbers 1-10 into two sets in more than one way?
Can you break apart numbers 1-10 using various drawings or equations (e.g., 5=2=3 and 5=4+1)?
Can you subtract the numbers 0 through 5 quickly and correctly?

Skills

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
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 equation.
5. Fluently add and subtract within 5.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.OA, , K.OA.3, K.OA.4, K.OA.5, K.OA.1, K.OA.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Number and Operations in Base Ten

Guiding Questions

Can you take apart numbers 11-19 into tens and ones and show your work with a drawing or objects?
Can you take apart numbers 11-19 into tens and ones and show your work with an equation (e.g., 10+8=18)?

Skills

Work with numbers 11-19 to gain foundations for place value.
1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.NBT, , K.NBT.1

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 1)

Guiding Questions

Can you tell different ways to measure objects?
Can you describe an object by its measurable attributes?
Can you compare and describe two objects to see which has more of/less of an attribute (e.g., heavier/lighter, taller/shorter)?

Curriculum Mapping

4/22/2013

Skills

Describe and compare measurable attributes.
1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object 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.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.1, K.MD.2

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 2)

Guiding Questions

Can you tell how two-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you tell how three-dimensional shapes are similar and/or different using the length and number of sides and corners?
Can you use different materials to build objects that I see around you?
Can you draw shapes to represent objects you see around you?
Can you use simple shapes to make a larger, new shape?

Skills

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?"

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.4, K.G.5, K.G.6

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Measurement and Data (Cluster 2)

Guiding Questions

Can you classify objects into categories and count and sort objects in each category?

Skills

Classify objects and count the number of objects in each category.
3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.MD, , K.MD.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Geometry (Cluster 1)

Guiding Questions

Curriculum Mapping

4/22/2013

Can you describe things around you using names of three-dimensional shapes?
Can you use positional words to tell where an object is located (above, below, beside, in front of, behind, and next to)?
Can you identify shapes as two-dimensional ("flat") or three-dimensional ("solid")?

Skills

Identify and describe shapes (squares, circles, triangles, 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.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.G, , K.G.1, K.G.2, K.G.3

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans

Content/Concept

Counting and Cardinality (Cluster 3)

Guiding Questions

Can you identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group?
Can you compare two numbers 1-10 and tell which is greater, which is less, and if they are equal?

Skills

Compare numbers.
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.
7. Compare two numbers between 1 and 10 presented as written numerals.

Common Core

NGA Center/CCSSO: Common Core State Standards: College- and Career-Readiness Standards and K-12 Mathematics: Kindergarten: K.CC, , K.CC.6, K.CC.7

Assessments

Checklists, Observations, Teacher Created Assessments, Group Projects

Activities/ Lesson Plans
