

Number Corner Kindergarten Correlations to Common Core State Standards

Common Core State Standards for Mathematics, Kindergarten

In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

(1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

(2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Kindergarten Overview

Counting & Cardinality

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations & Algebraic Thinking

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

Number & Operations in Base Ten

- Work with numbers 11–19 to gain foundations for place value.

Measurement & Data

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

Geometry

- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

Mathematical Practices

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.

Taken from the Common Core State Standards for Mathematics 2010, pages 9 & 10.

Number Corner Kindergarten Correlations to Common Core State Standards (cont.)

COUNTING AND CARDINALITY K.CC			
Standard	Number Corner	Supplement	Assessment
Know number names and the count sequence.			
1. Count to 100 by ones and by tens.	Sept–May Calendar Grid Sept Our Month in School Oct–May A Link Each School Day Dec/Jan Kid Count Dec/Jan Our Month in School Feb Our Month in School Feb Day 100 Activities May Our Month in School	Set A1, Number & Operations: Counting on the Number Line, Activities 1–3 Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment * Tasks 1, 3, 9 * The Kindergarten Yearlong Skills Assessment can be accessed on the Bridges Support for K Teachers page at www.mathlearningcenter.org
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Dec/Jan Our Month in School Feb Our Month in School Feb–May A Link Each School Day	Set A1, Number & Operations: Counting on the Number Line, Activity 1	Formal Kindergarten Yearlong Skills Assessment, Task 9
3a. Write numbers from 0 to 20.	Sept. Our Month in School Nov Writing Today's Date Feb–April Calendar Grid		
3b. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	Dec/Jan Kid Count	Set A4, Number & Operations: Addition & Subtraction, Activity 1	
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 name with one and only one object.	Dec/Jan Our Month in School	Set A4, Number & Operations: Addition & Subtraction, Activity 1 Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 3
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.		Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 3

Number Corner Kindergarten Correlations to Common Core State Standards (cont.)

COUNTING AND CARDINALITY K.CC			
Standard	Number Corner	Supplement	Assessment
c. Understand that each successive number name refers to a quantity that is one larger.	Oct–May A Link Each School Day Dec/Jan Our Month in School Feb Our Month in School May Our Month in School	Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 3
5a. 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;	Dec/Jan Kid Count Dec/Jan Our Month in School Feb Our Month in School Mar/Apr Our Month in School May Here’s When We Were Born	Set A1, Number & Operations: Counting on the Number Line, Activities 2, 3 Set A4, Number & Operations: Addition & Subtraction, Activity 1 Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Tasks 3, 9
Count to tell the number of objects.			
5b. given a number from 1–20, count out that many objects.		Set A1, Number & Operations: Counting on the Number Line, Activity 3 Set A4, Number & Operations: Addition & Subtraction, Activity 1 Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern (Extension 4)	Formal Kindergarten Yearlong Skills Assessment, Task 3
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. (Include groups with up to ten objects.)	Mar/Apr Our Month in School May Here’s When We Were Born	Set A6, Number & Operations: One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 5
7. Compare two numbers between 1 and 10 presented as written numerals.	Nov. Writing Today’s Date	Set A1, Number & Operations: Counting on the Number Line, Activities 2, 3 Set A6, One Dot, Many Dots Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 2

OPERATIONS AND ALGEBRAIC THINKING K.OA			
Standard	Number Corner	Supplement	Assessment
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.	Mar/Apr Our Month in School	Set A4, Number & Operations: Addition & Subtraction, Activity 1	Formal Kindergarten Yearlong Skills Assessment, Task 10

Number Corner Kindergarten Correlations to Common Core State Standards (cont.)

OPERATIONS AND ALGEBRAIC THINKING K.OA			
Standard	Number Corner	Supplement	Assessment
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.			
2a. Solve addition and subtraction word problems.	Dec/Jan Kid Count Feb/Mar Link Each School Day May Here's When We Were Born		Formal Kindergarten Yearlong Skills Assessment, Task 10
2b. Add and subtract within 10, e.g., by using objects or drawings to represent the problem.	Mar/Apr Our Month in School		Formal Kindergarten Yearlong Skills Assessment, Task 10
3a. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings,	Mar/Apr Our Month in School	Set A4, Number & Operations: Addition & Subtraction, Activity 1	Formal Kindergarten Yearlong Skills Assessment, Task 8
3b. and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	Mar/Apr Our Month in School	Set A4, Number & Operations: Addition & Subtraction,, Activity 1	
4a. 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,			
4b. and record the answer with a drawing or equation.			
5. Fluently add and subtract within 5.	Mar/April Our Month in School	Set A4, Number & Operations: Addition & Subtraction, Activity 1	Formal Kindergarten Yearlong Skills Assessment, Task 8

NUMBER AND OPERATIONS IN BASE TEN K.NBT			
Standard	Number Corner	Supplement	Assessment
Work with numbers 11–19 to gain foundations for place value.			
1a. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings,	Dec/Jan Our Month in School		
1b. and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$);			
1c. understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	Oct–May Link a Day Dec/Jan Our Month in School	Set A1, Number & Operations: Counting on the Number Line, Activity 1	

Number Corner Kindergarten Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA K.MD			
Standard	Number Corner	Supplement	Assessment
Describe and compare measurable attributes.			
1a. Describe measurable attributes of objects, such as length or weight.		Set D8 Measurement: Measuring Tools Calendar Pattern	
1b. 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.			
Classify objects and count the number of objects in each category.			
3a. Classify objects into given categories;	Oct/Nov Our Month in School Mar/April Our Month in School May Here’s When We Were Born		Formal Kindergarten Yearlong Skills Assessment, Task 7
3b. count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)	Oct/Nov Our Month in School Mar/April Our Month in School May Here’s When We Were Born		

GEOMETRY K.G			
Standard	Number Corner	Supplement	Assessment
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).			
1a. Describe objects in the environment using names of shapes,	September Calendar Grid	Set C6 Geometry: 3-D Shapes in the World Calendar Pattern	
1b. and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.		Set C3 Geometry: Flying Butterflies Calendar Pattern; Set C4 Geometry: Teddy Bear & Box Calendar Pattern	

Number Corner Kindergarten Correlations to Common Core State Standards (cont.)

GEOMETRY K.G			
Standard	Number Corner	Supplement	Assessment
2. Correctly name shapes regardless of their orientations or overall size.	Sep Calendar Grid Dec Calendar Grid	Set C5 Geometry: Growing Shapes Calendar Pattern; Set C6 Geometry: 3-D Shapes in the World Calendar Pattern	
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").			
Analyze, compare, create, and compose shapes.			
4a. Analyze and compare two-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).	September Calendar Grid	Set C5 Geometry: Growing Shapes Calendar Pattern	Formal Kindergarten Yearlong Skills Assessment, Task 4
4b. Analyze and compare 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).		Set C6 Geometry: 3-D Shapes in the World Calendar Pattern	
5a. Model shapes in the world by building shapes from components (e.g., sticks and clay balls)...		Set C6 Geometry: 3-D Shapes in the World Calendar Pattern (Extension 3)	
5b. 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?"		Set C5 Geometry: Growing Shapes Calendar Pattern	