

Pojoaque Valley School

Mathematics CCSS Pacing Guide

Grade K

**Skills adapted from
Kentucky Department of Education
Math Deconstructed Standards
** Evidence of attainment/assessment,
Vocabulary, Knowledge, Skills and
Essential Elements adapted from
Wisconsin Department of Education and
Standards Insights Computer-Based Program*

Version 3

2015-2016

Pojoaque Valley Schools Math Common Core Pacing Guide Introduction

The Pojoaque Valley Schools pacing guide documents are intended to guide State Standards (CCSS) over the course of an instructional school year. The **by quarter**. Teachers should understand that the **focus standards** emphasize a specific timeframe. However, because a certain quarter does not address specific standards previously taught, standards should be reinforced while working on the focus quarter. Some standards will **recur** across all quarters due to their importance on an ongoing basis.

The Math pacing guides are grounded in four key components: the key fluency level, the critical areas designated in the CCSS Math Standards, the Common Core and the integration of the Standards for Mathematical Practice. In planning instruction, teachers incorporate the 8 mathematical practices for mathematics to ensure they are mastered by all students.

The Math CCSS pacing guides contain the following elements:

- **Grade Level:** Identify the grade level of the intended standard
- **Standard with code:** Defines the knowledge and skills for students, domain and standard number.
- **Domain:** Larger groups of related standards. Standards from different domains are closely related.
- **Cluster:** Summarize groups of related standards.
- **Skills and Knowledge:** Identified as subsets of the standard and apply the skills and knowledge embedded in the standard to meet the full intent of the standard.

Number and Operations in Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic.

1. Use place value understanding to round whole numbers to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Standard

Version 2 of the Pojoaque Valley School District Pacing guides for Reading Language Arts and Mathematics are based on the done by staff and teachers of the school district using the Kentucky model, and a synthesis of the excellent work done by Wisconsin Cooperative Educational Service Agency 7 (CESA 7) School Improvement Services, Green Bay, WI. (2010), *Standards Insight project*.

Standards Insight was developed to give educators a tool for in depth investigation of the Common Core State Standards (CCSS). The CCSS are “unpacked” or dissected, identifying specific knowledge, skills, vocabulary, understandings, and evidence of student attainment for each standard. *Standards Insight* may be used by educators to gain a thorough grasp of the CCSS or as a powerful collaborative tool supporting educator teams through the essential conversations necessary for developing shared responsibility for student attainment of all CCSS. . . . serves as a high-powered vehicle to help educators examine the standards in a variety of ways.

The Version 2 Pojoaque Valley School District Pacing guides present the standard with levels of detail and then the necessary skills by quarter based on the Kentucky model. On the second page for each standard, the synthesis of the *Standards Insight* project is presented in a way that further defines and refines the standard such that teachers may use the information to refine their teaching practices.

Based on this synthesis of work and the purpose for the unpacking, the following fields were selected as most helpful to aid in understanding of the Common Core Standards that will lead to shifts in instruction:

1. Evidence of Student Attainment: “What could students do to show attainment of the standard?”
2. Vocabulary: “What are key terms in the standard that are essential for interpretation and understanding in order for students to learn the content?”
3. Knowledge: “What does the student need to know in order to aid in attainment of this standard?”
4. Skills and Understanding: “What procedural skill(s) does the student need to demonstrate for attainment of this standard?”, and “What will students understand to attain the standard?”

The following fields are included in Version 2:

Evidence of Student Attainment: This field describes what the standard may look like in student work. Specific expectations are listed in performance terms showing what students will say or do to demonstrate attainment of the standard.

Standards Vocabulary: This field lists words and phrases specific to each standard. Shared interpretation and in depth understanding of standards vocabulary are essential for consistent instruction across and within grade levels and content areas.

Knowledge: The knowledge field lists what students will need to know in order to master each standard (facts, vocabulary, and definitions).

Skills and Understanding: The skills field identifies the procedural knowledge students apply in order to master each standard (actions, applications, strategies), as well as the overarching understanding that connects the standard, knowledge, and skills. Understandings included in *Standards Insight* synthesize ideas and have lasting value.

Instructional Achievement Level Descriptors: This field lists, by level what a teacher can expect to see in a student who achieves at a particular level. Additionally teachers can use this field to differentiate instruction to provide further growth for student's in moving from one level to another. This field can be used to provide specific teaching approaches to the standard in question.

A Note About High School Standards: The high school standards are listed in conceptual categories. Conceptual categories portray a coherent view of high school instruction that crosses traditional course boundaries. We have done everything possible, with teacher input, to link individual standards to the appropriate pacing guides,

References to Tables: References to tables within the standards in the *Standards Insight* tool refer to Tables 1-5 found in the glossary of the Mathematics Common Core State Standards document found at www.corestandards.org.

Quarterly View of Standards Kindergarten Mathematics Pacing Guide	Quarter	1	2	3	4
K.CC.1 Count to 100 by ones and by tens.			X		
K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).			X		
Standard with code: K.CC.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).	X	X			
K.CC.4abc 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. c. Understand that each successive number name refers to a quantity that is one larger.	X	X			
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.			X	X	
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 ¹ Include groups with up to ten objects.			X		
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.			X		
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings ² , sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ² Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the standards.)			X	X	
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.				X	X
K.OA.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 $5 = 4 + 1$).				X	X
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 equation.				X	X
Quarter	1	2	3	4	
K.OA.5 Fluently add and subtract within 5.			X	X	
K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g. by using objects and drawings, and record each		X	X		

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.				
K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.			X	
K.MD.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. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>			X	X
K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.³ ³ Limit category counts to be less than or equal to 10.	X			
K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above, below, beside, in front of, behind,</i> and <i>next to.</i>	X			
K.G.2 Correctly name shapes regardless of their orientations or overall size.	X			
K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	X			
Standard with code: 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).		X		
K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	X			
K.G.6 Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i>	X			

**CSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.CC.1 Count to 100 by ones and by tens.							
Domain: Counting and Cardinality		Cluster: Know number names and the count sequence					
Quarter 1:		Quarter 2: Count (verbal sequence only) to 100 by ones starting at 1. Count (verbal sequence only) to 100 by 10's starting at 10.		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use the pattern and regularity in the counting sequence to orally count in sequence from 1 to 100 by ones and tens. (twenty-ONE, twenty-TWO...thirty-ONE, thirty-TWO or Ten, Twenty, Thirty,).</p>		<p>Students know:</p> <p>Number word sequence.</p>	<p>Students understand that/are able to:</p> <p>Count sequentially.</p> <p>The number sequence has an inherent pattern which repeats every decade.</p>	<p>EEK.CC.1. Starting with one, count to 10 by ones.</p>	<p>Level IV Students will: EEK.CC.1. Starting with any number greater than one, count to 10 by ones. Ex. Count numbers to 10 starting with one and any number great than one and less than 10. Ex. Count sequentially to 10 starting with one, independent of objects, pictures, or things as a student would recite the alphabet. Ex. Count with or without one-to-one correspondence numbers beyond 10. Ex. Count groups of 10. Ex. Count backwards from 10.</p> <p>Level III Students will: EEK.CC.1. Starting with one, count to 10 by ones. Ex. Count number to 10 verbally. Ex. Count without one-to-one correspondence to 10 starting with one by rote. Ex. Sequentially sing numbers to 10 starting with one.</p> <p>Level II Students will: EEK.CC.1. Starting with one, count by ones to five. Ex. Count own fingers to five verbally. Ex. Sequentially, count sequence to five either independent of objects, pictures, or things as a student would recite the alphabet or by pointing. Ex. Count without one-to-one correspondence to five. Ex. Sequentially sing numbers to five. Ex. Sing along to counting song.</p> <p>Level I Students will: EEK.CC.1. Count with teacher from one to two. Ex. Count with the teacher to two.</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).							
Domain: Counting and Cardinality		Cluster: Know number names and the count sequence.					
Quarter 1:		Quarter 2: Count forward by 1's beginning with another number other than 1 (verbal sequence only).		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use the pattern and regularity in the counting sequence to recognize the position of any number between 1 and 100 and then continue counting in sequence from the given number.</p>		<p>Students know:</p> <p>Number word sequence.</p>	<p>Students understand that/are able to:</p> <p>Count sequentially.</p> <p>The number sequence has an inherent pattern which repeats every decade no matter where in the counting sequence they start.</p>	<p>EEK.CC.2. N/A</p>	<p>EEK.CC.2. N/A</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.CC.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).							
Domain: Counting and Cardinality		Cluster: Know number names and the count sequence.					
Quarter 1: Write numerals 0 to 10 Write the number that represents a given number of objects from 0-10.		Quarter 2: Write numerals 0 to 20 Write the number that represents a given number of objects from 0-20.		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given a number orally or a quantity of objects (from 0-20),</p> <p>Write the corresponding numeral.</p>	<p>Number</p> <p>Numeral</p>	<p>Students know:</p> <p>Number sequence,</p> <p>Number/ numeral correspondence.</p>	<p>Students understand that/are able to:</p> <p>Recognize and name numerals 0-20,</p> <p>Write numerals 0-20,</p> <p>Count objects with one-to-one correspondence.</p> <p>Quantities can be represented in a variety of ways (e.g., number words, objects, symbols).</p>	<p>EEK.CC.3. N/A</p>	<p>EEK.CC.3. N/A</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K								
Standard with code: K.CC.4abc								
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.								
c. Understand that each successive number name refers to a quantity that is one larger.								
Domain: Counting and Cardinality			Cluster: Count to tell the number of objects.					
Quarter 1: Represent quantities using numbers and represent numbers using quantities Match each object with one and only one number name and each number with one and only one object. Recognize the number of objects is the same regardless of their arrangement or the order in which they were counted. Realize that the last number name said tells the number of objects counted. Generalizes that each successive number name refers to a quantity that is one larger. When counting objects, say the number names in order while matching each object with a number.			Quarter 2: Represent quantities using numbers and represent numbers using quantities Match each object with one and only one number name and each number with one and only one object. Recognize the number of objects is the same regardless of their arrangement or the order in which they were counted. Realize that the last number name said tells the number of objects counted. Generalizes that each successive number name refers to a quantity that is one larger. When counting objects, say the number names in order while matching each object with a number.		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.		Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors			

<p>Students:</p> <p>Strategically use methods to keep track of objects in order to accurately determine the number of items in a group,</p> <p>Use connections between the counting sequence and the quantity in a group to justify answers to questions such as "What is one more?",</p> <p>Explain why there is no need to recount the objects after s/he counts a set of objects and then the objects are rearranged.</p>	<p>Cardinality</p> <p>Quantity</p>	<p>Students know:</p> <p>Number word sequence,</p> <p>Strategies for keeping track of objects that have already been counted (e.g., crossing out, moving, organizing objects, grouping by five).</p>	<p>Students understand that/are able to:</p> <p>Count sequentially,</p> <p>Strategically apply methods for keeping track of objects while counting with one-to-one correspondence.</p> <p>Numbers name quantities,</p> <p>The last number named when counting tells the number of objects counted,</p> <p>The number of objects is the same regardless if their arrangement is changed or they are counted in different orders (e.g., count right to left, left to right, top to bottom),</p> <p>Each successive number name refers to a quantity that is one larger.</p>	<p>EEK.CC.4. Demonstrate one-to-one correspondence pairing each object with one and only one number and each name with only one object.</p>	<p>Level IV Students will: EEK.CC.4. Demonstrates one-to-one correspondence with more than one. Ex. When counting objects, say the number names in standard order and pair each object with one and only one number name. Ex. Pass pencils out to classmates and count the pencils as each classmate gets a pencil. Ex. Uses one-to-one correspondence when counting up to 10 common objects in the classroom (crayons, blocks, buttons). Ex. Count out 10 pennies to exchange for a dime. Ex. Sing a counting song and raise the correct number of fingers with each number. Ex. Count dots on dice and move forward corresponding number of spaces on game board. Ex. Round robin count to 10.</p> <p>Level III Students will: EEK.CC.4. Demonstrate one-to-one correspondence pairing each object with one and only one number and each name with only one object. Ex. Uses one-to-one correspondence when counting up to five common objects in classroom (crayons, blocks, buttons). Ex. Create sets of objects to five. Ex. Place corresponding number of beans in an egg carton with each section labeled 1-5. Ex. Move beads on an abacus as another student counts one to five. Ex. Given an egg carton, place five stickers in each section.</p> <p>Level II Students will: EEK.CC.4. Demonstrate one object's correspondence with one object. Ex. Uses one-to-one correspondence when counting up to three common objects in classroom (crayons, blocks, buttons). Ex. Given bowls, place three balls in each. Ex. Match objects by pairing each object with one and only one other number. Ex. Given "one" letter in each student's mailbox to go home.</p> <p>Level I Students will: EEK.CC.4. With guidance and support, count one object. Ex. Place "one" letter in each student's mailbox to go home. Ex. Put one object in each section of an egg carton. Ex. Indicate "one" object when asked, "Where is one [name of familiar object]?" Ex. Give one pencil to each classmate.</p>
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Grade Level: K							
Standard with code: 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.							
Domain: Counting and Cardinality		Cluster: Count to tell the number of objects.					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
		<p>Count up to 20 objects that have been arranged in a line, rectangular array, or circle</p> <p>Count as many as 10 items in a scattered configuration</p> <p>Match each object with one and only one number name and each number with one and only one object</p> <p>Conclude that the last number of the counted sequence signifies the quantity of the counted collection.</p> <p>Given a number from 1-20, count out that many objects.</p>		<p>Count up to 20 objects that have been arranged in a line, rectangular array, or circle</p> <p>Count as many as 10 items in a scattered configuration</p> <p>Match each object with one and only one number name and each number with one and only one object</p> <p>Conclude that the last number of the counted sequence signifies the quantity of the counted collection.</p> <p>Given a number from 1-20, count out that many objects.</p>			
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
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<p>Students:</p> <p>Justify answers to "how many?" questions by accurately counting the quantity of objects in a variety of configurations,</p> <p>Given any number from 0 to 20, create corresponding physical representations of the quantity from a larger set.</p>	<p>Count out</p> <p>Rectangular array</p>	<p>Students know:</p> <p>Number word sequence,</p> <p>Strategies for keeping track of objects that have already been counted.</p>	<p>Students understand that/are able to:</p> <p>Use one-to-one correspondence when counting,</p> <p>Count sequentially,</p> <p>Strategically apply methods for keeping track of objects while counting.</p> <p>Numbers name quantities,</p> <p>The last number named when counting tells the number of objects counted,</p> <p>The number of objects is the same regardless if their arrangement is changed or they are counted in different orders.</p>	<p>EEK.CC.5. Count out up to three objects from a larger set, pairing each object with one and only one number name to tell how many.</p>	<p>Level IV Students will: EEK.CC.5. Counts five objects out of a group of more than five objects. Counts a given set of five objects, pairing each object with one and only one number name and when asked, "how many", says five without recounting. Ex. Given a box of crayons, select five crayons as requested by teacher. Ex. Given a set of five objects, count out three objects. Ex. From an array of five objects, count each object in the group only one time and tell how many was in the group without recounting the objects. Ex. Count five children out of all the children only one time and tell how many without recounting.</p> <p>Level III Students will: EEK.CC.5. Count out up to three objects from a larger set, pairing each object with one and only one number name to tell how many. Ex. Given an array of objects, count out three of the objects, counting each object only once and tell how many. Ex. Given a box of crayons, select three crayons as requested by teacher. Ex. Count out three counting bears from a group of five. Ex. Pass out three pages to each student from a stack of paper, counting one, two, three each time, and tell how many they gave to the students.</p> <p>Level II Students will: EEK.CC.5. Counts either one or two objects out of a group of five objects. Ex. Given a box of crayons, select either one or two crayons as requested by teacher. Ex. Count out two counting bears from a group of five.</p> <p>Level I Students will: EEK.CC.5. Identify one object out of a group of objects. Ex. Identify between a set with one or two apples when asked, "show me one apple" and make a choice. Ex. Go to the prize box and pick one object.</p>
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CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: 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							
<i>¹ Include groups with up to ten objects.</i>							
Domain: Counting and Cardinality		Cluster: Compare numbers					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
		Describe greater than, less than, or equal to. Determine whether a group of 10 or fewer objects is greater than, less than, or equal to another group of 10 or fewer objects.					
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Explain and justify answers to questions such as "Which group has more?" or "Which group has less?" by using strategies for comparing quantities of physical objects such as one-to-one matching, recognizing without counting the number of objects (subitizing) in familiar arrangements, or counting. (Include groups with up to ten objects).</p>		<p>Students know:</p> <p>Strategies for determining whether the number of objects in one group is greater than, less than, or equal to the number of objects in a second group.</p>	<p>Students understand that/are able to:</p> <p>Strategically apply methods for comparing the number of objects in two or more groups,</p> <p>Recognize without counting, the number of objects (subitizing) in familiar arrangements.</p> <p>Successive number names refer to quantities that are larger than the previous numbers in the counting sequence.</p>	<p>EEK.CC.6. Identify whether the number of objects in one group is more or less than (when the quantities are clearly different) or equal to the number of objects in another group.</p>	<p>Level IV Students will: EEK.CC.6. Identify whether the number of objects in one group is more or less than or equal to the number of objects in another group. Ex. Identify which group has more from two groups created by the teacher (e.g., The teacher creates two groups of manipulative objects whose total quantity is within three. Given two groups of blocks, for example, one group has seven blocks and the other has four, the student is able to identify which group has more blocks. The teacher asks which group has more and the student identifies it. Ex. Given two groups of blocks, one group has eight blocks and other has five, identify which group has less blocks. Ex. Given five papers to pass out to a group of eight students, indicate that there are MORE students than papers by counting the people and then counting the papers.</p> <p>Level III Students will: EEK.CC.6. Identify whether the number of objects in one group is more or less (when the quantities are clearly different) or equal to the number of objects in another group. Ex. Given a choice of two boxes of blocks, one box with nine blocks and one box with four blocks, identify which box has more blocks. Ex. Given a choice of two boxes of blocks, one box with eight blocks and one box with four blocks, identify which box has fewer blocks.</p> <p>Level II Students will: EEK.CC.6. Given two groups of dramatically different quantities of objects, identify which group has more. Ex. When two groups of objects are counted out to the student, identify which has more objects than another group (e.g., using matching and counting strategies). Ex. Given two bowls of snacks with a large difference in quantity, identify which has more. Ex. Given a choice of two boxes of blocks with a difference in quantity of at least twice the other, identify which has more.</p> <p>Level I Students will: EEK.CC.6. Explore groups that have more and less. Ex. Using sand/water/ball tables with drastically different quantities of materials, explore the quantity while the teacher is talking about the language of more. Ex. Place silly bands/bangles/bells with drastically different quantities on the arms or legs of the students and explore the quantity of more while the teacher uses the language of more. Ex. Given two groups of buttons with very different amounts, identify the group that has “more” by pointing to picture symbols of more/less, big/small.</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.							
Domain: Counting and Cardinality		Cluster: Compare numbers					
Quarter 1:		Quarter 2: Know the quantity of each numeral. Determine whether a written number is greater than, less than, or equal to another written number.		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Justify their identification of the larger or smaller of a pair of numerals using a variety of strategies. (e.g., referring to their order in the counting sequence, modeling the quantities, using relational thinking such as, "I know that 6 is more than 3 and I know that 10 is more than 6, so 10 must be more than 3.).</p>		<p>Students know:</p> <p>Number word sequence,</p> <p>Number - numeral correspondence,</p> <p>Strategies for determining whether one number in written form is greater than, less than, or equal to a second number.</p>	<p>Students understand that/are able to:</p> <p>Count sequentially,</p> <p>Strategically apply strategies for comparing numbers.</p> <p>Successive number names refer to quantities that are larger than the previous numbers in the counting sequence.</p>	<p>EEK.CC.7. N/A</p>	<p>EEK.CC.7. N/A</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K									
Standard with code: K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings², sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ²Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the standards.)									
Domain: Operations and Algebraic Thinking		Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.							
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:			
		<p>Know adding is putting together parts to make the whole.</p> <p>Know subtracting is taking apart or taking away from the whole to find the other part.</p> <p>Know the symbols (+, -, =) and the words (plus, minus, equal) for adding and subtracting.</p> <p>Analyze addition or subtraction problem to determine whether to ‘put together’ or ‘take apart’.</p> <p>Model an addition/subtraction problem given a real-life story.</p> <p>Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations in multiple ways, e.g., $2+3=5$, $5=2+3$, $+ =$, and vertically.</p>		<p>Know adding is putting together parts to make the whole.</p> <p>Know subtracting is taking apart or taking away from the whole to find the other part.</p> <p>Know the symbols (+, -, =) and the words (plus, minus, equal) for adding and subtracting.</p> <p>Analyze addition or subtraction problem to determine whether to ‘put together’ or ‘take apart’.</p> <p>Model an addition/subtraction problem given a real-life story.</p> <p>Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations in multiple ways, e.g., $2+3=5$, $5=2+3$, $+ =$, and vertically.</p>					
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.		

Evidence of Student	Vocabulary	Knowledge	Skills	Common Core	Instructional Achievement Level Descriptors
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Attainment				Essential Elements	
<p>Students: Given oral descriptions of addition and subtraction mathematical contexts,</p> <p>Create and explain representations of the quantities and the actions in the situations using physical, pictorial, or symbolic representations.</p>	<p>Expression</p> <p>Equation</p>	<p>Students know:</p> <p>Characteristics of addition and subtraction contexts (putting together, adding to, taking apart, and taking from),</p> <p>Addition and subtraction strategies.</p>	<p>Students understand that/are able to:</p> <p>Represent quantities and operations (addition & subtraction) physically, pictorially, or symbolically,</p> <p>Use informal and mathematical language to communicate the connections among addition and subtraction contexts and related physical, pictorial, or symbolic representations.</p> <p>Both putting together and adding to can be viewed as addition,</p> <p>Both taking apart and taking from can be viewed as subtraction.</p>	<p>EEK.OA.1. Represent addition as “putting together” or subtraction as “taking from” in everyday activities.</p>	<p>Level IV Students will: EEK.OA.1. Represent addition as “putting together” and subtraction as “taking from” with quantities to 10. Ex. Combine two sets of objects, pictures, or things to make one set of 10 through the use of assistive technology or C device. Ex. Take away one set of objects from 10 and determine how many remain. Ex. Using a simple story context and objects, the student puts together and takes from as appropriate by directly modeling the problem with objects, actions, or symbols. Ex. Follow directions to gather enough materials for everyone and then passes them out to each student. Ex. Put a counting bear with a group to add or take away a counting bear to subtract.</p> <p>Level III Students will: EEK.OA.1. Represent addition as “putting together” or subtraction as “taking from” in everyday activities. Ex. Identify the total number of crayons when one student has three crayons and another student has two, and they put their crayons together to share. Describe the action as put together. Ex. Add to a group of crayons when told to add to group. Ex. Take away from a group of crayons when told to take away from the group. Ex. Given five stickers, give another student one of the five stickers, and describes the action as take away. Ex. Join linking cubes to show action/process of putting together or addition. Ex. Break apart linking cubes/snap blocks/bristle blocks/pop-beads to show action/process of taking from or subtraction.</p> <p>Level II Students will: EEK.OA.1. Follow directions to “put together” by adding one or “take from” by taking one. Ex. Given a bowl of counting bears, add a counting bear to the bowl. The teacher calls the action “putting together” or addition. Ex. Take one when the teacher is passing out supplies and directs the students to take one. The teacher calls the action “taking away” or subtraction. Ex. Place popsicle sticks into a circle and use language to describe addition or “putting together”. Ex. Using cubes, create towers by adding or taking away one cube at a time. Ex. Remove popsicle sticks from a circle and use language to describe subtraction or “taking from”.</p> <p>Level I Students will: EEK.OA.1. “Put together” or “take from” with teacher. Ex. The teacher and student together add a block to a stack while teacher says, “put together.” Ex. The teacher and student together take a block from a stack while the teacher says, “take away.”</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: 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.							
Domain: Operations and Algebraic Thinking		Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
				<p>Add and subtract within 10 (Maximum sum and minuend is 10)</p> <p>Solve addition and subtraction word problems within 10.</p> <p>Use objects/drawings to represent an addition and subtraction word problem.</p>		<p>Add and subtract within 10 (Maximum sum and minuend is 10)</p> <p>Solve addition and subtraction word problems within 10.</p> <p>Use objects/drawings to represent an addition and subtraction word problem.</p>	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given oral addition and subtraction word problems within 10,</p> <p>Explain and justify solutions and solution paths using connections among a variety of representations (e.g., acting out with objects, manipulatives, drawings, etc.).</p>		<p>Students know:</p> <p>Characteristics of addition and subtraction contexts (putting together, adding to, taking apart, and taking from),</p> <p>Addition and subtraction strategies.</p>	<p>Students understand that/are able to:</p> <p>Represent quantities and operations (addition & subtraction) physically, pictorially, or symbolically,</p> <p>Strategically use a variety of representations to solve addition and subtraction word problems,</p> <p>Use informal and mathematical language to communicate the connections among addition and subtraction contexts and related physical, pictorial, or symbolic representations,</p> <p>Accurately compute sums and differences.</p> <p>Both putting together and adding to can be viewed as addition,</p> <p>Both taking apart and taking from can be viewed as subtraction,</p> <p>Mathematical problems can be solved using a variety of strategies and representations.</p>	<p>EEK.OA.2. N/A</p>	<p>EEK.OA.2. N/A</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.OA.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 $5 = 4 + 1$).							
Domain: Operations and Algebraic Thinking		Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
				Solve addition number sentences within 10. Decompose numbers less than or equal to 10 into pairs in more than one way. Use objects or drawings then record each composition by a drawing or writing an equation.		Solve addition number sentences within 10. Decompose numbers less than or equal to 10 into pairs in more than one way. Use objects or drawings then record each composition by a drawing or writing an equation.	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given any number less or equal to 10,</p> <p>Persist as they use objects or drawings to decompose the given number into at least two unique pairs of smaller numbers,</p> <p>Record their solutions using pictures or equations.</p>	<p>Decompose Equation</p>	<p>Students know:</p> <p>Vocabulary: equal to and the concept of equality meaning the "same amount as".</p>	<p>Students understand that/are able to:</p> <p>Represent quantities physically, pictorially, and symbolically.</p> <p>Quantities may be named in a variety of ways.</p>	<p>EEK.OA.3. N/A</p>	<p>EEK.OA.3. N/A</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: 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 equation.							
Domain: Operations and Algebraic Thinking		Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
				<p>Know that two numbers can be added together to make ten</p> <p>Using materials or representations, find the number that makes 10 when added to the given number for any number from 1 to 9, and record the answer using materials, representations, or equations.</p>		<p>Know that two numbers can be added together to make ten</p> <p>Using materials or representations, find the number that makes 10 when added to the given number for any number from 1 to 9, and record the answer using materials, representations, or equations.</p>	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given any number from 1 to 9,</p> <p>Use a variety of representations and problem solving strategies to determine the number that when added to the given number equals 10,</p> <p>Orally explain and justify the written representations (drawing or equation) of their solutions.</p>		<p>Students know:</p> <p>Strategies for finding missing parts of numbers when numbers are being composed or decomposed.</p>	<p>Students understand that/are able to:</p> <p>Represent quantities and operations physically, pictorially, or symbolically,</p> <p>Strategically use a variety of representations to solve problems.</p> <p>Two smaller quantities may be joined to create a larger target quantity,</p> <p>A quantity may be broken into two smaller quantities,</p> <p>Mathematical tools and representations (e.g., ten frames, ten fingers) can be used to solve problems efficiently.</p>	<p>EEK.OA.4. N/A</p>	<p>EEK.OA.4. N/A</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.OA.5 Fluently add and subtract within 5.							
Domain: Operations and Algebraic Thinking		Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.					
Quarter 1:		Quarter 2:		Quarter 3: Fluently with speed and accuracy add and subtract within 5.		Quarter 4: Fluently with speed and accuracy add and subtract within 5.	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use an efficient strategy (e.g., recall, doubles, derived facts, close to doubles, counting on 1 or 2, counting back 1 or 2) to accurately name the sums or differences within 5.</p>		<p>Students know:</p> <p>Strategies for efficiently determining sums and differences within 5.</p>	<p>Students understand that/are able to:</p> <p>Use addition strategies efficiently.</p> <p>Efficient use of computation strategies involves sense-making with the numbers in the problem.</p>	<p>EEK.OA.5. N/A</p>	<p>EEK.OA.5. N/A</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g. by using objects and 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.							
Domain: Number and Operations in Base Ten		Cluster: Work with numbers 11-19 to gain foundations for place value.					
Quarter 1:		Quarter 2: Know that a (spoken) number (11-19) represents a quantity. Understand that numbers 11-19 are composed of 10 ones and one, two, three, four, five, six, seven, eight, or nine ones. Represent compositions or decompositions by a drawing or equation. Compose numbers 11-19 into ten ones and some further ones using objects and drawings. Decompose numbers 11-19 into ten ones and some further ones using objects and drawings.		Quarter 3: Know that a (spoken) number (11-19) represents a quantity. Understand that numbers 11-19 are composed of 10 ones and one, two, three, four, five, six, seven, eight, or nine ones. Represent compositions or decompositions by a drawing or equation. Compose numbers 11-19 into ten ones and some further ones using objects and drawings. Decompose numbers 11-19 into ten ones and some further ones using objects and drawings.		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given any two-digit number between 10 and 20,</p> <p>Use a variety of representations (e.g., symbolic: 10+8; pictorial: one line and 8 dots; physical: place value blocks, bundles of sticks, or groups of fingers, etc.) to show and explain the decomposition of the number into one group of 10 and the correct number of ones.</p>	Equation	<p>Students know:</p> <p>Number sequence to 20,</p> <p>Part-part-whole.</p>	<p>Students understand that/are able to:</p> <p>Use place value models (e.g. base ten blocks, pictorial models) to decompose numbers.</p> <p>Ten things can be represented as one ten or as ten ones.</p>	<p>EEK.NBT.1. N/A (See EEK.NBT.1.4 and EEK.NBT.1.6)</p>	<p>EEK.NBT.1. N/A (See EEK.NBT.1.4 and EEK.NBT.1.6)</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.							
Domain: Measurement and Data		Cluster: Describe and compare measurable attributes					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
				<p>Know that objects have measurable attributes and know what they are called, such as length and weight.</p> <p>Describe an object by using attributes such as: width, height, length, weight, etc.</p> <p>Describe more than one measurable attribute of a single object.</p>			
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given a variety of 2D and 3D objects,</p> <p>Use informal language (short, tall, heavy, light, fat, skinny, etc.) to describe measurable attributes of objects such as length or weight.</p>	<p>Attribute</p>	<p>Students know:</p> <p>Words for describing the measurable attributes of objects.</p>	<p>Students understand that/are able to:</p> <p>Describe measurable attributes of objects using informal language.</p> <p>objects have measurable attributes that can be described.</p>	<p>EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light).</p>	<p>Level IV Students will: EEK.MD.1-3. Order objects according to attributes (big/smaller/smallest, heavy/lighter/lightest). Ex. Given two backpacks of different weight, describe or demonstrate which one is heavier. Ex. Given two cubes of different sizes, describe or demonstrate which cube is bigger and which cube is smaller. Ex. Compare heights of two classmates to a standard such as a meter stick. Ex. Compare sports balls (baseball, basketball, tennis ball, etc.) using various lengths of yarn. Ex. Given blocks of varying sizes, identify which are heavier/lighter and smaller/bigger.</p> <p>Level III Students will: EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light). Ex. Given a big book and a small book, describe or demonstrate which one is bigger and which one is smaller. Ex. Given the shoe of a student and the teacher, identify which one is bigger and which one is smaller. Ex. Sort heavy and light objects according to weight. Ex. Given the hand of a student in the class and the hand of the teacher, identify which one is bigger and which one is smaller. Ex. Given two objects of varying weight, describe or demonstrate which is heavy/light or large/small.</p> <p>Level II Students will: EEK.MD.1-3. Using a model or a template, sort objects by one attribute (big/small or heavy/light). Ex. Sort counting bears by size using a model or template. Ex. Given two objects, where one is at least twice the size of the other, identify which one is bigger and which one is smaller with descriptive prompts from the teacher. Ex. Identify bigger ball when shown a beach ball and a tennis ball, and listening to the teacher use voice inflections and kinesthetic motions to exaggerate bigger and smaller. Ex. Identify the bigger ball when shown a golf ball and beach ball and listening to the teacher using voice inflections and motions to exaggerate. Ex. Sort objects in the classroom into groups of heavy and light (e.g., bowling ball,</p>

					<p>beach ball, and a rock). Ex. Given two pictures of real-life objects, select the bigger one.</p> <p>Level I Students will: EEK.MD.1-3. Match objects by attribute big and small. Ex. Touch a large object (such as a pumpkin) as teacher describes it as big when compared to a smaller pumpkin toy. Ex. Indicate small pumpkin as teacher describes it as small when compared with a large pumpkin. Ex. Indicate if they want the big ball or the small ball.</p>
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**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.MD.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. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>							
Domain: Measurement and Data		Cluster: Describe and compare measurable attributes					
Quarter 1:		Quarter 2:		Quarter 3:		Quarter 4:	
				<p>Know the meaning of the following words: more/less, taller/shorter, etc.</p> <p>Know that two objects can be compared using a particular attribute.</p> <p>Compare two objects and determine which has more and which has less of the measurable attribute to describe the difference.</p>		<p>Know the meaning of the following words: more/less, taller/shorter, etc.</p> <p>Know that two objects can be compared using a particular attribute.</p> <p>Compare two objects and determine which has more and which has less of the measurable attribute to describe the difference.</p>	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use direct comparison of physical objects to determine and explain which object has "more of" or "less of" the attribute.</p>	<p>Direct comparison</p>	<p>Students know:</p> <p>Comparison words for measurable attributes of geometric shapes (e.g., taller, shorter, heavier, lighter, holds more, holds less).</p>	<p>Students understand that/are able to:</p> <p>Directly compare two objects to explain which object has "more of" or "less of" the attribute in question.</p> <p>Objects and geometric figures have measureable attributes that allow them to be compared.</p>	<p>EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light).</p>	<p>Level IV Students will: EEK.MD.1-3. Order objects according to attributes (big/smaller/smallest, heavy/lighter/lightest). Ex. Given two backpacks of different weight, describe or demonstrate which one is heavier. Ex. Given two cubes of different sizes, describe or demonstrate which cube is bigger and which cube is smaller. Ex. Compare heights of two classmates to a standard such as a meter stick. Ex. Compare sports balls (baseball, basketball, tennis ball, etc.) using various lengths of yarn. Ex. Given blocks of varying sizes, identify which are heavier/lighter and smaller/bigger.</p> <p>Level III Students will: EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light). Ex. Given a big book and a small book, describe or demonstrate which one is bigger and which one is smaller. Ex. Given the shoe of a student and the teacher, identify which one is bigger and which one is smaller. Ex. Sort heavy and light objects according to weight. Ex. Given the hand of a student in the class and the hand of the teacher, identify which one is bigger and which one is smaller. Ex. Given two objects of varying weight, describe or demonstrate which is heavy/light or large/small.</p> <p>Level II Students will: EEK.MD.1-3. Using a model or a template, sort objects by one attribute (big/small or heavy/light). Ex. Sort counting bears by size using a model or template. Ex. Given two objects, where one is at least twice the size of the other, identify which one is bigger and which one is smaller with descriptive prompts from the teacher. Ex. Identify bigger ball when shown a beach ball and a tennis ball, and listening to the teacher use voice inflections and kinesthetic motions to exaggerate bigger and smaller. Ex. Identify the bigger ball when shown a golf ball and beach ball and listening to the teacher using voice inflections and motions to exaggerate. Ex. Sort objects in the classroom into groups of heavy and light (e.g., bowling ball, beach ball, and a rock).</p>

					<p>Ex. Given two pictures of real-life objects, select the bigger one.</p> <p>Level I Students will: EEK.MD.1-3. Match objects by attribute big and small. Ex. Touch a large object (such as a pumpkin) as teacher describes it as big when compared to a smaller pumpkin toy. Ex. Indicate small pumpkin as teacher describes it as small when compared with a large pumpkin. Ex. Indicate if they want the big ball or the small ball.</p>
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**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.³							
³ Limit category counts to be less than or equal to 10.							
Domain: Measurement and Data		Cluster: Classify objects and count the number of objects in each category.					
Quarter 1: Recognize non-measurable attributes such as shape, color Recognize measurable attributes such as length, weight, height Know what classify means Know what sorting means Know that a category is the group that an object belongs to according to a particular, selected attribute Understand one to one correspondence with ten or less objects Classify objects into categories by particular attributes Count objects in a given group. Sort objects into categories then determine the order by number of objects in each category (limit category counts to be less than or equal to ten) For example, if m&m's are categorized by the attribute of color, then are "sorted" or ordered by the number in each group (there are more red than green, the blue group has fewer than the green.)		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given a group of objects,</p> <p>Sort the objects into teacher determined categories (no more than ten objects in any category), count the number of objects in each category, and order the categories by count.</p>	<p>Sort</p> <p>Classify</p>	<p>Students know:</p> <p>Category descriptors such as triangles, rectangles, round, curved sides, color, etc.</p>	<p>Students understand that/are able to:</p> <p>Sort objects,</p> <p>Effectively use strategies to count groups of objects.</p> <p>Geometric shapes can be grouped into classes of shapes that all seem to be alike based on their visual characteristics (and thereby named).</p>	<p>EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light).</p>	<p>Level IV Students will: EEK.MD.1-3. Order objects according to attributes (big/smaller/smallest, heavy/lighter/lightest). Ex. Given two backpacks of different weight, describe or demonstrate which one is heavier. Ex. Given two cubes of different sizes, describe or demonstrate which cube is bigger and which cube is smaller. Ex. Compare heights of two classmates to a standard such as a meter stick. Ex. Compare sports balls (baseball, basketball, tennis ball, etc.) using various lengths of yarn. Ex. Given blocks of varying sizes, identify which are heavier/lighter and smaller/bigger.</p> <p>Level III Students will: EEK.MD.1-3. Classify objects according to attributes (big/small, heavy/light). Ex. Given a big book and a small book, describe or demonstrate which one is bigger and which one is smaller. Ex. Given the shoe of a student and the teacher, identify which one is bigger and which one is smaller. Ex. Sort heavy and light objects according to weight. Ex. Given the hand of a student in the class and the hand of the teacher, identify which one is bigger and which one is smaller. Ex. Given two objects of varying weight, describe or demonstrate which is heavy/light or large/small.</p> <p>Level II Students will: EEK.MD.1-3. Using a model or a template, sort objects by one attribute (big/small or heavy/light). Ex. Sort counting bears by size using a model or template. Ex. Given two objects, where one is at least twice the size of the other, identify which one is bigger and which one is smaller with descriptive prompts from the teacher. Ex. Identify bigger ball when shown a beach ball and a tennis ball, and listening to the teacher use voice inflections and kinesthetic motions to exaggerate bigger and smaller. Ex. Identify the bigger ball when shown a golf ball and beach ball and listening to the teacher using voice inflections and motions to exaggerate. Ex. Sort objects in the classroom into groups of heavy and light (e.g., bowling ball, beach ball, and a rock).</p>

					<p>Ex. Given two pictures of real-life objects, select the bigger one.</p> <p>Level I Students will: EEK.MD.1-3. Match objects by attribute big and small. Ex. Touch a large object (such as a pumpkin) as teacher describes it as big when compared to a smaller pumpkin toy. Ex. Indicate small pumpkin as teacher describes it as small when compared with a large pumpkin. Ex. Indicate if they want the big ball or the small ball.</p>
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**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above, below, beside, in front of, behind, and next to.</i>							
Domain: Geometry		Cluster: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).					
Quarter 1: Describe positions such as <i>above, below, beside, in front of, behind, and next to.</i> Determine the relative position of the 2-dimensional or 3-dimensional shapes within the environment, using the appropriate positional words.		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Describe objects in the environment using names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres), and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.</p>		<p>Students know:</p> <p>2D and 3D shapes (triangle, square, rectangle, hexagon, rhombus, circle, cube, pyramid, sphere, and cone).</p>	<p>Students understand that/are able to:</p> <p>Describe objects in the environment using names of shapes,</p> <p>Describe the relative positions of objects (e.g., above, below, beside, in front of, behind, next to).</p> <p>Geometric language and ideas can be used to describe and interpret the physical world.</p>	<p>EEK.G.1. Identify words of proximity to describe the relative position.</p>	<p>Level IV Students will: EEK.G.1. Use words referring to frames of reference or demonstrate relative position. Ex. Given manipulatives, follow directions to place them in proper position (put the dog behind the boy). Ex. When looking at birds outside the window, tell where the bird is (e.g., in the tree, or on the wire). Ex. Given a picture, indicate the object that is in the named position (point to the person standing in front of the window). Ex. Looking at a picture in a book, use the correct word to describe the position of items in the pictures. Ex. Play “Simon Says” using positional words. Ex. “Is the ball next to you, in front of you, or behind you?” Ex. Given a set of building blocks, stack them to demonstrate beside and between.</p> <p>Level III Students will: EEK.G.1. Identify words of proximity to describe the relative position. Ex. Given manipulatives, follow direction to place them in proper position (one block “on top” of another). Ex. Given a picture, indicate the object that is in the named position (point to the person standing between the trees). Ex. Indicate where another teacher is relative to their position when walking side-by-side (e.g., “Am I walking next to you or beside you? Beside me?”). Ex. Indicate the relative position of a desk (e.g., beside). Ex. Given manipulatives, follow direction to place them in proper position (put the dog under the table).</p> <p>Level II Students will: EEK.G.1. Respond to spatial words that describe relative position of an object using position terms (e.g., on, in, off). Ex. Given a picture, indicate the object that is in the named position (e.g., point to the person standing on the ladder). Ex. Play hide-and-seek with an object and tell the teacher where to hide it (on or in something). Another person comes in the room to find the object. The students tell them where the object is located (on or in something). Ex. After listening to a story, such as Hop on Pop, indicate answers to positional questions (e.g., “Is the ball in the box or outside of the box?”).</p>

					<p>Ex. Follow teacher directions when cleaning up from an activity by putting items away, such as put your crayons “in” your pencil box.</p> <p>Ex. Indicate choice when the teacher asks the student a series of questions, such as “do you want your hat ‘on’ your head or ‘in’ your backpack?” while preparing to go home.</p> <p>Level I Students will:</p> <p>EEK.G.1. Repeat positional words during an activity or lesson in which the teacher demonstrates the relative position of an object.</p> <p>Ex. Repeat or indicate the positional word the teacher uses as (s)he moves the student to physically demonstrate position terms (on, in).</p> <p>Ex. Repeat “in” as the teacher puts on a student’s shoes and describes the action as putting the students’ feet in the shoe.</p>
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CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.G.2 Correctly name shapes regardless of their orientations or overall size.							
Domain: Geometry		Cluster: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).					
Quarter 1: Know that size does not affect the name of the shape. Know that orientation does not affect the name of the shape		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use visual characteristics of shapes to orally justify naming 2D and 3D shapes in a variety of sizes and orientations.</p>		<p>Students know:</p> <p>2D and 3D shapes (triangle, square, rectangle, hexagon, rhombus, circle, cube, pyramid, sphere, and cone).</p>	<p>Students understand that/are able to:</p> <p>Use geometric reasoning and visual characteristics of shapes to name shapes in a variety of sizes and orientations.</p> <p>Geometric shapes can be grouped into classes of shapes that all seem to be alike based on their visual characteristics (and thereby named).</p>	<p>EEK.G.2-3. Match two-dimensional shapes (circle, square, and triangle).</p>	<p>Level IV Students will: EEK.G.2-3. Match two-dimensional shapes that vary in size (circle, square, and triangle). Ex. Given an assortment of shapes that vary in size, match the shapes according to shape and size. Ex. Using computer software, select a triangle and match it to a target triangle that is a different size. Ex. Given a circle, go on a “Circle Hunt” to find other examples of circles around the school.</p> <p>Level III Students will: EEK.G.2-3. Match two-dimensional shapes (circle, square, and triangle). Ex. Given a collection of pairs of identically sized shapes, match the shapes. Ex. Match shapes in an interactive whiteboard activity. Ex. Given four poker chips and four blocks, match the objects based on shape.</p> <p>Level II Students will: EEK.G.2-3. Match a shape to its duplicate. Ex. Given one shape and shown two shapes, select the matching shape from the two choices to one of hers/his. Ex. Match a colored construction paper circle to an outline on paper. Ex. Complete a shape-sorting box.</p> <p>Level I Students will: EEK.G.2-3. Repeat a model to match shapes. Ex. Match shaped objects with teacher model. Repeat after observing a teacher-directed matching activity routine involving shapes. Ex. Match shaped objects with teacher prompts. Repeat after observing the teacher match the correct shaped object to the same object. Ex. Repeat after observing the teacher use pictures cut from magazines that show circles and squares. Teacher holds up a picture and asks what shape it is, then places it on a large circle or square mat.</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).							
Domain: Geometry		Cluster: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).					
Quarter 1: Identify 2-dimensional shapes as lying in a plane and flat Identify 3-dimensional shapes as a solid		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use visual characteristics of shapes (e.g., flat, fat, sticking out, solid, etc.) to justify categorizing shapes as 2D or 3D.</p>	<p>Two-dimensional plane</p> <p>Three-dimensional space</p>	<p>Students know:</p> <p>Characteristics of 2D and 3D shapes using either formal geometric or informal language descriptors.</p>	<p>Students understand that/are able to:</p> <p>Use geometric reasoning and visual characteristics of shapes to designate shapes as 2D or 3D.</p> <p>Geometric shapes can be grouped into classes of 2D or 3D shapes based on their visual characteristics (and thereby named).</p>	<p>EEK.G.2-3. Match two-dimensional shapes (circle, square, and triangle).</p>	<p>Level IV Students will: EEK.G.2-3. Match two-dimensional shapes that vary in size (circle, square, and triangle). Ex. Given an assortment of shapes that vary in size, match the shapes according to shape and size. Ex. Using computer software, select a triangle and match it to a target triangle that is a different size. Ex. Given a circle, go on a “Circle Hunt” to find other examples of circles around the school.</p> <p>Level III Students will: EEK.G.2-3. Match two-dimensional shapes (circle, square, and triangle). Ex. Given a collection of pairs of identically sized shapes, match the shapes. Ex. Match shapes in an interactive whiteboard activity. Ex. Given four poker chips and four blocks, match the objects based on shape.</p> <p>Level II Students will: EEK.G.2-3. Match a shape to its duplicate. Ex. Given one shape and shown two shapes, select the matching shape from the two choices to one of hers/his. Ex. Match a colored construction paper circle to an outline on paper. Ex. Complete a shape-sorting box.</p> <p>Level I Students will: EEK.G.2-3. Repeat a model to match shapes. Ex. Match shaped objects with teacher model. Repeat after observing a teacher-directed matching activity routine involving shapes. Ex. Match shaped objects with teacher prompts. Repeat after observing the teacher match the correct shaped object to the same object. Ex. Repeat after observing the teacher use pictures cut from magazines that show circles and squares. Teacher holds up a picture and asks what shape it is, then places it on a large circle or square mat.</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: 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).							
Domain: Geometry		Cluster: Analyze, compare, create, and compose shapes.					
Quarter 1:		Quarter 2: Identify and count number of sides, vertices/"corners", and other attributes of shapes Describe similarities of various two- and three-dimensional shapes Describe differences of various two- and three-dimensional shapes Analyze and compare two-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, and other attributes (e.g. having sides of equal length). 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).		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Use informal language to describe, compare, and contrast a variety of 2D and 3D shapes.</p>	<p>Informal language</p>	<p>Students know:</p> <p>Shape components (e.g., sides, corners, vertices, faces, edges, etc.),</p> <p>Informal language to describe these components.</p>	<p>Students understand that/are able to:</p> <p>Decompose shapes into component parts,</p> <p>Use geometric reasoning and attributes to compare and contrast a variety of shapes.</p> <p>Geometric shapes can be grouped into classes of shapes that all seem to be alike based on their visual characteristics (and thereby named).</p>	<p>EEK.G.4. N/A</p>	<p>EEK.G.4. N/A</p>

**CCSS Math Pacing Guide
Grade K**

Grade Level: K							
Standard with code: K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.							
Domain: Geometry		Cluster: Analyze, compare, create, and compose shapes.					
Quarter 1: Recognize and identify (square, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, spheres) Identify shapes in the real world Analyze the attributes of real world objects to identify shapes. Construct shapes from components (e.g., sticks and clay balls) Draw shapes		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students:</p> <p>Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p>		<p>Students know:</p> <p>2D and 3D shapes (triangle, square, rectangle, hexagon, rhombus, circle, cube, pyramid, sphere, and cone).</p>	<p>Students understand that/are able to:</p> <p>Compose shapes from materials that represent the component parts of the shape (e.g., pipe cleaners as sides of a triangle).</p> <p>Geometric shapes can be constructed and represented using a variety of physical materials.</p>	<p>EEK.G.5. N/A</p>	<p>EEK.G.5. N/A</p>

CCSS Math Pacing Guide
Grade K

Grade Level: K							
Standard with code: 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?"							
Domain: Number and Operations - Factors		Cluster: Understand decimal notation for fractions, and compare decimal fractions.					
Quarter 1: Identify simple shapes (squares, triangles, rectangles, hexagons) Analyze how to put simple shapes together to compose a new or larger shape. Compose a new or larger shape using more than one simple shape.		Quarter 2:		Quarter 3:		Quarter 4:	
Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Evidence of Student Attainment	Vocabulary	Knowledge	Skills	Common Core Essential Elements	Instructional Achievement Level Descriptors
<p>Students: Given simple shapes, Construct designated larger shapes.</p>		<p>Students know: 2D and 3D shapes (triangle, square, rectangle, hexagon, rhombus, circle, cube, pyramid, sphere, and cone).</p>	<p>Students understand that/are able to: Use simple shapes to form larger shapes. Geometric shapes can be composed of and decomposed into smaller shapes.</p>	<p>EEK.G.6. N/A</p>	<p>EEK.G.6. N/A</p>