

**COMMON CORE ESSENTIAL ELEMENTS**

**FOR MATHEMATICS**

**KINDERGARTEN**



## KINDERGARTEN COMMON CORE ESSENTIAL ELEMENTS

<b>Kindergarten Mathematics Standards: Counting and Cardinality</b>	
<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<p><b>Know number names and the count sequence.</b>  <b>K.CC.1.</b> Count to 100 by ones and by tens.</p>	<b>EEK.CC.1.</b> Starting with one, count to 10 by ones.
<p><b>K.CC.2.</b> Count forward beginning from a given number within the known sequence (instead of having to begin at one).</p>	<b>EEK.CC.2.</b> N/A
<p><b>K.CC.3.</b> 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).</p>	<b>EEK.CC.3.</b> N/A
<p><b>Count to tell the number of objects.</b>  <b>K.CC.4.</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ Understand that each successive number name refers to a quantity that is one larger.</li> </ul>	<b>EEK.CC.4.</b> Demonstrate one-to-one correspondence pairing each object with one and only one number and each name with only one object.
<p><b>K.CC.5.</b> 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.</p>	<b>EEK.CC.5.</b> 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><b>Compare numbers.</b>  <b>K.CC.6.</b> 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.</p>	<b>EEK.CC.6.</b> 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><b>KK.CC.7.</b> Compare two numbers between 1 and 10 presented as written numerals.</p>	<b>EEK.CC.7.</b> N/A

<b>Kindergarten Mathematics Standards: Operations and Algebraic Thinking</b>	
<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</b>	
<b>K.OA.1.</b> Represent addition and subtraction with objects, fingers, mental images, drawings <sup>1</sup> , sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	<b>EEK.OA.1.</b> Represent addition as “putting together” or subtraction as “taking from” in everyday activities.
<b>K.OA.2.</b> Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	<b>EEK.OA.2.</b> N/A
<b>K.OA.3.</b> Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2+3$ and $5 = 4+1$ ).	<b>EEK.OA.3.</b> N/A
<b>K.OA.4.</b> 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.	<b>EEK.OA.4.</b> N/A
<b>K.OA.5.</b> Fluently add and subtract within 5.	<b>EEK.OA.5.</b> N/A

<b>Kindergarten Mathematics Standards: Number and Operations in Base Ten</b>	
<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>Work with numbers 11-19 to gain foundations for place value.</b>	
<b>K.NBT.1.</b> Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	<b>EEK.NBT.1.</b> N/A (See EEK.NBT.1.4 and EEK.NBT.1.6)

<sup>1</sup> Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

<b>Kindergarten Mathematics Standards: Measurement and Data</b>	
<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>Describe and compare measurable attributes.</b>	
<p><b>K.MD.1.</b> Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p><b>K.MD.2.</b> 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></p>	<b>EEK.MD.1-3.</b> Classify objects according to attributes (big/small, heavy/light).
<b>Classify objects and count the number of objects in each category.</b>	
<b>K.MD.3.</b> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <sup>2</sup>	

<b>Kindergarten Mathematics Standards: Geometry</b>	
<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</b>	
<b>K.G.1.</b> 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> .	<b>EEK.G.1.</b> Identify words of proximity to describe the relative position.
<p><b>K.G.2.</b> Correctly name shapes regardless of their orientations or overall size.</p> <p><b>K.G.3.</b> Identify shapes as two-dimensional (lying in a plane, “flat”); or three-dimensional, “solid”).</p>	<b>EEK.G.2-3.</b> Match two-dimensional shapes (circle, square, triangle).

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<sup>2</sup> Limit category counts to be less than or equal to 10.