



Grade K - Unit E - Ten and Then Some

Unit Focus

In this unit, students will use a variety of materials to represent mathematical situations. Students will read, write, and compare numerals with one-to-one correspondence and cardinality. They will also relate comparing numbers to comparing the weight of two objects.

Students will decompose or break numbers into their component parts based on place value in order to:

- recognize numbers 11-20 as "ten and some more"
- compare numbers to 20 using greater than and less than

Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer		
Standards - Common Core <i>Mathematics: K</i> - Know number names and the count sequence. - Count to 100 by ones and by tens. (CCSS.MATH.CONTENT.K.CC.A.1) - Count forward beginning from a given number within the known sequence (instead of having to begin at 1). (CCSS.MATH.CONTENT.K.CC.A.2) - 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). (CCSS.MATH.CONTENT.K.CC.A.3) - Compare numbers. - 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. (CCSS.MATH.CONTENT.K.CC.C.6) - Compare two numbers between 1 and 10 presented as written numerals. (CCSS.MATH.CONTENT.K.CC.C.7) - Work with numbers 11-19 to gain foundations for place value. - 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. (CCSS.MATH.CONTENT.K.NBT.A.1) - Describe and compare measurable attributes. - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (CCSS.MATH.CONTENT.K.MD.A.1)	<i>Students will be able to independently use their learning to...</i> T1 Represent situations using mathematical reasoning and symbols. T2 Apply models to solve problems.		
	Meaning		
	Understanding(s)	Essential Question(s)	
	<i>Students will understand that...</i> U1 Numbers are composed of groups of tens and ones U2 Mathematicians make sense of quantities to represent situations mathematically. U3 Mathematicians create or use models to generalize, represent, and solve problems.	<i>Students will keep considering...</i> Q1 How do I show my thinking? (using representations e.g. words, numbers, models). Q2 What model best represents this problem? Q3 What do the quantities mean?	
	Acquisition of Knowledge and Skill		
Knowledge	Skill(s)		
<i>Students will know...</i> K1 Numbers from 11 - 20 are "ten and some more" K2 How to compare written numerals K3 How to compare two sets of objects using greater than, less than or equal	<i>Students will be skilled at...</i> S1 Counting forward by 1s to 100 S2 Counting backward by 1s from 20 S3 Counting by 10s to 100 S4 Reading and writing numerals to 20 S5 Subitizing up to 5		

Stage 1: Desired Results - Key Understandings

- 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. (*CCSS.MATH.CONTENT.K.MD.A.2*)
- Classify objects and count the number of objects in each category.
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (*CCSS.MATH.CONTENT.K.MD.B.3*)
- Mathematical Practices
- Construct viable arguments and critique the reasoning of others. (*CCSS.MATH.MP.3*)
- Model with mathematics. (*CCSS.MATH.MP.4*)
- Look for and make use of structure. (*CCSS.MATH.MP.7*)

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- Analyzing: Examining information/data/evidence from multiple sources to identify possible underlying assumptions, patterns, and relationships in order to make inferences. (*POG.1.2*)
- Product Creation: Effectively use a medium to communicate important information. (*POG.3.2*)

K4 How to compare the length/weight of two objects

K5 We can use models to understand quantities

K6 Counting situations can be represented using symbols

K7 Vocabulary: greater than, less than, more than, compare, tens, ones, after, before, more, less, equal, heavy, light, weight

S6 Using tools (such as craft sticks, unifix cubes, double ten frames) to visualize a teen number