

Unit 9: Measurement by Direct Comparison

Unit #:	APSDO-00017541	Duration:	17.0 Day(s)	Date(s):	05-11-2017
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Grades:
 K

Subjects:
 Mathematics

Unit Focus

In this unit, students focus on **measurement by direct comparison**. Students will be able to describe measurable attributes of objects, such as length or weight and describe several measurable attributes of a single object. They will 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. Students will classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Primary instructional materials for this unit include On Core and Everyday Mathematics.

Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p>Common Core <i>Mathematics: K</i></p> <ul style="list-style-type: none"> Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <i>CCSS.MATH.CONTENT.K.MD.A.1</i> 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 	<p>T1 (T30) Describe, classify, and compare objects. T2 (T50) Based on an understanding of any problem, initiate a plan, execute it and evaluate the reasonableness of the solution. T3 (T53) Articulate how mathematical concepts relate to one another in the context of a problem or in the theoretical sense. T4 (T51) Examine alternate methods to accurately and efficiently solve problems. T5 (T52) Use appropriate tools strategically to deepen understanding of mathematical concepts.</p>	
	Meaning	
	Understandings	Essential Questions
	<p>U1 (U510) Every problem is a member of a</p>	<p>Q1 (Q101) How do I classify/compare objects</p>

<p>child as taller/shorter. <i>CCSS.MATH.CONTENT.K.MD.A.2</i></p> <ul style="list-style-type: none"> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <i>CCSS.MATH.CONTENT.K.MD.B.3</i> Construct viable arguments and critique the reasoning of others. <i>CCSS.MATH.MP.3</i> Reason abstractly and quantitatively. <i>CCSS.MATH.MP.2</i> Use appropriate tools strategically. <i>CCSS.MATH.MP.5</i> 	<p>category of problems that has a similar structure and set of characteristics. U2 (U520) Effective arguments are based on logical mathematical thinking. U3 (U540) The choice of a mathematical tool depends upon the information you have and the information you want. U4 (U301) There are many appropriate units that can be used to measure an object(s), but the precision is dependent on the situation. U5 (U303) Measurements with the same unit can be compared and combined.</p>	<p>or sets of objects? Q2 (Q512) What information is needed and how do I use it to solve a problem? Q3 (Q513) How could this strategy be used to solve similar problems? Q4 (Q552) Does my solution make sense? Q5 (Q541) How do I use tools to solve problems?</p>
Acquisition of Knowledge and Skill		
Knowledge	Skills	
	<p>S1 Describe measurable attributes of objects (length, weight)</p> <p>S2 Compare two objects using a measurable attribute</p>	