

Measurement and Data K.MD	Measurement and Data 1.MD	Measurement and Data 2.MD
Describe and compare measurable attributes.	Measure lengths indirectly and by iterating length units.	Measure and estimate lengths in standard units.
 Describe measure measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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. 	 Order three objects by length; compare the lengths of two objects indirectly by using a third object. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. 	 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. Estimate lengths using units of inches, feet, centimeters, and meters. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. Relate addition and subtraction to length.
Measurement and Data 2.MD	Measurement and Data 3.MD	Measurement and Data 4.MD
 Relate addition and subtraction to length. 5. Use addition and subtraction within 100 to solve word problems involving lengths given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number. 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole-number sums and differences within 100 on a number line diagram. Represent and interpret data. 9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. 	 <i>Represent and interpret data.</i> Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. <i>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</i> Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same area and different areas or with the same area and different perimeters. 	 Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. 1. Know relative sizes of measurement units within one system of units including km, m, cm. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. 2. Solve word problems involving distances, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. 3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

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