

Grade 2 Mathematics	Unit 12 – Metric Measurement and 3-D Shapes
<b>Big Idea/Rationale:</b>	In this unit, children continue to develop their measurement skills and learn to convert between metric units of length. Activities with 3-dimensional figures include identifying faces, edges, and vertices of rectangular prisms, and sorting shapes according to attributes. Children continue to develop their spatial sense as they sketch faces of solid figures, build rectangular prisms from nets, draw rectangular prisms from different viewpoints and find volume by counting cubic units.
<b>Enduring Understandings:</b>	<ul style="list-style-type: none"> <li>• The base 10 system is utilized in our system of counting, money, and metric measurement.</li> <li>• Two- and three- dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes.</li> </ul>
<b>Essential Questions:</b>	<ul style="list-style-type: none"> <li>• How are meters, decimeters, and centimeters related?</li> <li>• How is a 3-D shape different from a 2-D shape?</li> <li>• Can 2-D shapes be found in 3-D shapes?</li> <li>• How can you tell the difference between different 3-D shapes?</li> <li>• Name some examples real-life 3-D objects.</li> </ul>
<b>Lesson Objectives:</b>	<ul style="list-style-type: none"> <li>• Make a meter stick.</li> <li>• Compare metric and monetary systems.</li> <li>• Measure the length and height of objects and people.</li> <li>• Enter data in a table.</li> <li>• Create and answer questions about data.</li> <li>• Define meter, centimeter and decimeter.</li> <li>• Use abbreviations cm, dm, and m.</li> <li>• Review relationships among centimeters, decimeters, and meters.</li> <li>• Measure with metric units.</li> <li>• Convert measures in centimeters to a combination of meters.</li> <li>• Solve story problems requiring metric conversion.</li> <li>• Understand the base ten system in metric measurement and numbers.</li> <li>• Recognize the base ten system in metric and monetary systems.</li> <li>• Solve story problems involving metric and monetary systems.</li> <li>• Distinguish between 2- and 3-dimensional shapes.</li> <li>• Measure the length, width, and height of a rectangular prism.</li> <li>• Identify faces, edges, and vertices of a rectangular prism.</li> <li>• Count cubic units to find volume.</li> <li>• Identify and name 3-dimensional shapes.</li> <li>• Determine if a solid stacks, rolls, and/or slides.</li> <li>• Compare 3-dimensional shapes.</li> <li>• Sort 3-dimensiional shapes using a Venn diagram.</li> </ul>
<b>Common Core State Standards:</b>	<ul style="list-style-type: none"> <li>• <b>2.MD.A.3:</b> Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li>• <b>2.MD.A.4:</b> Measure to determine how much longer one object is that</li> </ul>

	<p>another, expressing the length difference in terms of standard length unit.</p> <ul style="list-style-type: none"><li>• <b>2.G.A.1:</b> Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes</li></ul> <p><b>Mathematical Practices</b></p>
<b>Materials and Resources:</b>	Grade 2 Math Expressions, Math Journals, manipulatives, IXL Mathematics