

Grade 4 Unit 3 Family Resource

Unit Name: Understanding and Applying Measurement to Solve Problems

What's my child learning in Unit 3?	What does this mean? What does it look like?	How can I help my child at home?												
<ul style="list-style-type: none"> Students will understand relative sizes of units within the metric system (mm, cm, m, km; g, kg; ml, l) by developing benchmarks through hands on experiences and visual representations. 	<p>Metric Benchmarks: A benchmark is anything that you are familiar with by size.</p> <p>Linear Measurement: <u>1 meter:</u> From the doorknob to the floor <u>1 centimeter:</u> The width of your pinky finger, the width of a large paper clip <u>1 millimeter:</u> The thickness of a dime <u>1 kilometer:</u> About 3 times around a football field, about 6 city blocks</p> <p>Weight/Mass: <u>1 gram:</u> The mass of a small paper clip <u>1 kilogram:</u> The mass of an average textbook (A kilogram is a little more than 2 pounds in customary units)</p> <p>Liquid measurement - Capacity: <u>1 liter:</u> A large water bottle, half a 2-liter bottle of soda, a small pitcher <u>1 milliliter:</u> a drop from an eyedropper</p>	<p>LearnZillion - Video showing kilometers, meters, centimeters, and millimeters by comparing their sizes</p>												
<ul style="list-style-type: none"> Students will solve multi-step problems involving measurement and conversion of measurements from a larger unit to a smaller unit using mm, cm, m, km; g, kg; ml, l. 	<div style="display: flex; justify-content: space-around;"> <div data-bbox="527 829 1066 1227"> <p style="text-align: center;">Using tape diagrams to solve word problems</p> <p><i>Lisa put two flavors of soda in a glass. There were 80 ml of soda in all. She put three times as much orange drink as strawberry. How many ml of orange did she put in?</i></p> <p style="font-size: small;">In this diagram, quantities are represented on a measurement scale.</p> </div> <div data-bbox="1108 1003 1312 1227"> <p style="text-align: center;">Centimeter and meter equivalences</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>cm</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>1</td> </tr> <tr> <td>200</td> <td>2</td> </tr> <tr> <td>300</td> <td>3</td> </tr> <tr> <td>500</td> <td></td> </tr> <tr> <td>1000</td> <td></td> </tr> </tbody> </table> </div> </div>	cm	m	100	1	200	2	300	3	500		1000		<p>Toy Store - Quiz with 10 word problems relating to purchasing items at a toy store.</p>
cm	m													
100	1													
200	2													
300	3													
500														
1000														
<ul style="list-style-type: none"> Students will record measurement equivalents using a two column table (conversion table) to use as a tool for problem solving. 	<p>They make statements such as, if one foot is 12 inches, then 3 feet has to be 36 inches because there are 3 groups of 12. See Example Below:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Yards</th> <th>Feet</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3</td> </tr> <tr> <td>2</td> <td>6</td> </tr> </tbody> </table>	Yards	Feet	1	3	2	6	<p>LearnZillion - Video showing how to convert length in customary measurement by using a conversion chart</p>						
Yards	Feet													
1	3													
2	6													

3	9
n	$n \times 3$

- Students will apply area and perimeter formulas to solve real world problems.

AREA

Perimeter: Distance around a figure

Add ALL SIDES TOGETHER
 $4n + 4n + 3n + 3n = 14n$

Area: The inside of a figure measured in square units

Multiply the length times the width OR COUNT BOXES
 $4n \times 3n = 12 \text{ sq. n}$



[Zoo Designer](#) - Interactive website calculating area and perimeter