

## Grade 3 Mathematics Unit Preview

### Quarter 3: Measurement

Objectives: (Your student will be able to)

- Use length, including width, height and distance, capacity (gallons, quarts, pints, cups, liters, milliliters), weight (grams, ounces, pounds), temperature (Celsius, Fahrenheit), and time (days, hours, minutes, seconds) to solve real world problems.
- Estimate, measure, and record temperature.
- Determine and use equivalent units of length within the same system. For example, 3 feet = 36 inches
- Estimate, measure, read and record in standard units of length using the appropriate tool/unit.
- Given a ruler measure and record length.
- Estimate and count square units to find the area.
- Estimate and count cubic units to find the volume of rectangular prisms.
- Tell time in days, hours, minutes, and seconds.


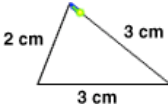
Vocabulary (on back)

Activities to do with your student (in addition to homework, optional):

- Use analog and digital clocks (to the minute) to tell time.
- Make records of important times of the day (wake-up, bedtime, dinner, homework).
- Determine how long or short a minute is. Find out how many times you can snap your fingers, hop on one foot and count how many words you can read in 60 seconds.
- Calculate elapsed time. Find how long it takes to complete daily activities (i.e., homework, eat dinner, take a shower).
- Use a calendar to determine how many months and days it is until your birthday or a special holiday.
- Measure the perimeter and area of the rooms in your home to determine which rooms are the smallest and largest.
- Use grid paper to make rectangles with the same perimeters. Determine the area for each rectangle.
- Fill a small box with blocks (e.g., sugar cubes) to determine its volume. Brainstorm multiple strategies to determine the volume.
- Use a recipe to prepare a healthy food. Measure the ingredients.
- Use cups, pints, quarts, half gallons and gallons in a bathtub or pool to determine equivalencies.
- Read the labels of food items to determine their weights. Compare the weights.
- Use a thermometer (use both Fahrenheit and Celsius) to record the daily temperature. Make a daily log and compare temperatures over a period of time.
- Measure the heights and weights of your family members. Convert measurements to smaller and larger units. For example, 3 feet = 36 inches.
- Practice addition and subtraction facts.
- Practice multiplication facts – (x 0, x 1, x 2, x 5, x 9, x 10).



Vocabulary: (Words your student will need to understand)

<ul style="list-style-type: none"> <li>• <b>area:</b> the number of square units needed to cover a surface</li> </ul>  <p>Area = 9 square units</p>	<ul style="list-style-type: none"> <li>• <b>capacity:</b> the amount a container can hold</li> </ul>
<ul style="list-style-type: none"> <li>• <b>temperature</b> (Fahrenheit, Celsius): a measure of how hot or cold something is</li> </ul>	<ul style="list-style-type: none"> <li>• <b>grid:</b> horizontal and vertical lines on a map. Grid paper is used for drawing and determining area.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>height:</b> the measurement from top to bottom</li> </ul>	<ul style="list-style-type: none"> <li>• <b>cubic unit:</b> a cube with a side unit, used to measure volume</li> </ul>
<ul style="list-style-type: none"> <li>• <b>measure:</b> use of standard units to find out size or quantity in regard to length, height, area, mass, weight, volume, capacity, time, temperature</li> </ul>	<ul style="list-style-type: none"> <li>• <b>distance:</b> the length of a line segment joining two points</li> </ul>
<ul style="list-style-type: none"> <li>• <b>time:</b> seconds, minutes, hours, days, months, years, and so on. Time is shown on a clock or calendar.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>perimeter:</b> the distance around a figure</li> </ul>  $2 \text{ cm} + 3 \text{ cm} + 3 \text{ cm} = 8 \text{ cm}$
<ul style="list-style-type: none"> <li>• <b>volume:</b> amount of space occupied by an object</li> </ul>	<ul style="list-style-type: none"> <li>• <b>standard units:</b> a traditional unit of measurement from the metric or customary system. Examples include inches, meters, grams, pounds, cups and liters.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>width:</b> distance across an object, from side to side</li> </ul>	<ul style="list-style-type: none"> <li>• <b>weight:</b> a scale is used to measure how heavy something is</li> </ul>