



Dear Fifth Grade Families,

In Unit 11, students will work on the following fifth grade Common Core standards in the Measurement and Data (MD) domain.

|        |                                                                                                                                                                                                                                              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.MD.1 | Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.                                             |
| 5.MD.2 | Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. |

### Unit 11 Concepts:

- Solve multi-step length, weight, volume, and time word problems that require unit conversion
- Make line plots to display a set of data with fractional units
- Multiply and divide to solve word problems with data from line plots

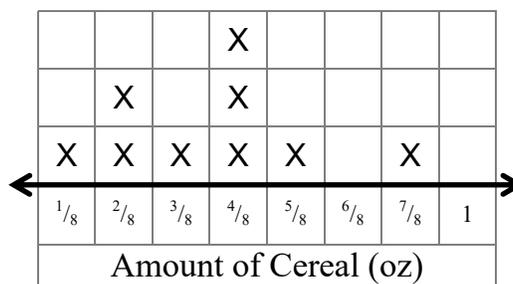
### Unit 11 Vocabulary:

- US Customary & Metric systems of measurement
- Convert
- Length: inch (in), feet (ft), yards (yd); centimeters (cm), meters (m), kilometers (km)
- Weight (mass): ounces (oz), pounds (lb); grams (g), kilograms (kg)
- Liquid volume: fluid ounces (fl oz), cups (c), pints (pt), quarts (qt), gallons (g); milliliter (mL), liter (L)
- Time: seconds (s), minutes (min), hours (h)
- Line plot

Ask questions like these to help your child become a productive mathematical thinker:

- What is the problem asking you to find? What information do you need to find before you can solve the problem? What will be your first step?
- Which units are you working with in this problem? How will you convert from one unit to the other?
- What steps do you take to organize data given in fractions before you can graph it in a line plot? How do you decide what scale to use on the horizontal axis?
- Why is a line plot helpful? Find ways to use line plots at home.
- There is just a little bit of cereal left in each of the boxes in the pantry. If I was to combine the different cereals together and serve it equally to four children for breakfast, how much cereal would each child get?
- A new box of your favorite cereal contains  $11\frac{3}{4}$  ounces. Knowing how much cereal is left in each of the boxes in the pantry, how much more would be needed to equal a new box?

Line Plot



### Need a review?

Have your student login to Swun Math to access lesson support videos.

We encourage you to talk with your child daily about what was learned in math class.  
Thank you for your support!

# Measurement Conversions (US Customary & Metric)



| <b>US Customary System</b><br>                 | <b>Metric System</b><br> |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Length/Distance</b>                                                                                                          |                                                                                                             |
| 12 inches (in) = 1 foot (ft)<br>3 foot (ft) = 1 yard (yd)                                                                       | 100 centimeters (cm) = 1 meter (m)<br>1,000 meters (m) = 1 kilometer (km)                                   |
| <b>Weight (Mass)</b>                                                                                                            |                                                                                                             |
| 16 ounces (oz) = 1 pound (lb)                                                                                                   | 1,000 grams (g) = 1 kilogram (kg)                                                                           |
| <b>Liquid Volume</b>                                                                                                            |                                                                                                             |
| 8 fluid ounces (fl oz) = 1 cup (c)<br>2 cups (c) = 1 pint (pt)<br>2 pints (pt) = 1 quart (qt)<br>4 quarts (qt) = 1 gallon (gal) | 1,000 milliliters (mL) = 1 liter (L)<br>1,000 liters (L) = 1 kiloliter (kL)                                 |
| <b>Time</b>                                                                                                                     |                                                                                                             |
| 60 seconds (sec) = 1 minute (min)<br>60 minutes (min) = 1 hour (hr)<br>24 hours (hr) = 1 day                                    |                                                                                                             |