

FAMILY MATH

Metric Measurement Conversion Tables

Dear Family,

Your student is learning to convert from larger metric units to smaller metric units. They work with units that measure length (centimeters, meters, and kilometers), mass (grams and kilograms), and liquid volume (milliliters and liters). Measurements are sometimes given as mixed units, such as 1 kilometer 300 meters.

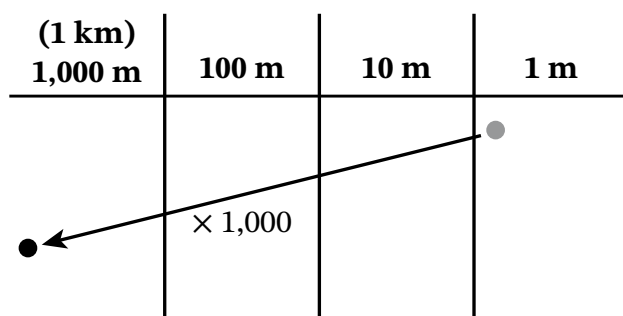
Mixed units have more than 1 unit. For example, the number 1,300 can be written with mixed units as 1 thousand 3 hundreds. Your student uses what they know about whole number place value units to rename mixed measurement units. Then they add and subtract measurements to solve word problems.

Key Terms

convert

kilometer

mixed units



1 kilometer is 1,000 times as long as 1 meter.

$$1 \text{ km} = 1,000 \times 1 \text{ m}$$

$$1 \text{ kilometer} = 1,000 \text{ meters}$$

Metric units have a similar relationship to place value units.

Kilometers	Meters
1	1,000
2	2,000
3	3,000
4	4,000

The relationship between 1 kilometer and 1,000 meters is used to convert 2, 3, and 4 kilometers to meters.

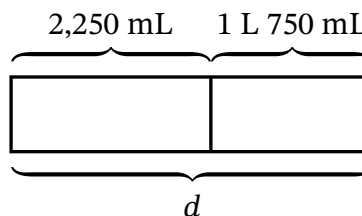
$$2,250 \text{ mL} + 1 \text{ L } 750 \text{ mL}$$

$$1 \text{ L } 750 \text{ mL} = 1,750 \text{ mL}$$

$$\begin{array}{r} 2,250 \\ + 1,750 \\ \hline 4,000 \end{array}$$

Mrs. Smith has 4,000 mL.

1 L 750 mL is a mixed measurement unit. Converting to milliliters before adding is one strategy for adding mixed measurement units.



At-Home Activities

Metric Units

Use real-world examples to practice converting metric units. For example, think of a familiar route, such as the distance from home to school. Find the distance of that route in whole number kilometers. If you don't know the distance in kilometers then estimate. 1 kilometer is about the same as $\frac{6}{10}$ miles. Then have your student convert kilometers to meters and centimeters.

How Much Taller?

Help your student practice subtracting mixed units by measuring the heights of members of your family. Use a meter stick or a tape measure with metric units to measure in meters and centimeters. Another option is to use an online conversion tool to convert known heights in feet and inches into meters and centimeters. Then have your student use subtraction to see how much taller one family member is than another.