

Review

Complete each problem below showing all of your work. These problems are similar to problems that we solved in first semester, and are useful skills that will be necessary for your success this semester.

Metric Review

- In one meter (m), there are how many ...
 - Centimeters (cm)
 - Millimeters (mm)
- In one kilometer (km), there are how many ...
 - Meters (m)
 - Centimeters (show work)
- In one liter (L), there are how many ...
 - Milliliters (mL)
- In one kilogram (kg), there are how many ...
 - Grams (g)
 - Milligrams (show work)

Metric Conversions

- 343 grams is equal to how many kilograms?
- 1230 meters is how many kilometers?
- 890 centimeters is equal to how many meters?
- How many milliliters are in 4.5 liters?
- How many centimeters are in 1.8 kilometers?
(This will require two steps!)
- How many milligrams are in 2 kilograms? (Two steps!)

Density

- What two things do you need to know in order to calculate density?
- What is the equation for density?
- What are the units for density?
- $1 \text{ cm}^3 = 1 \text{ ____}$
- What is the density of a substance if it has a mass of 10 grams and a volume of 2 mL?
Show all work and include units!
- What is the density of a substance if it has a mass of 8 grams and a volume of 32 cm^3 ?
- A substance has a density of 11 g/cm^3 and a volume of 5 cm^3 . What is this substance's mass?
- A substance has a mass of 20 grams and a density of 2.5 g/mL . What is the volume of this substance?