

Name: _____

Practice Problems: Metric Conversion and $M=D*V$

Remember the metric prefixes:

Kilo- Hecto- Deka- (g,m,L, etc.) Deci- Centi- Milli-

Also, remember:

For volume: 1 cm^3 (cubic centimeter) = 1 mL

Mass = Density x Volume

1. An object has a mass of 6.5 g. What is the mass of this object expressed in kilograms?
2. My water bottle says that it contains 473 mL of water. How many liters is this equivalent to?
3. The mass of a small paper cup is 3500 mg. What would this mass be if we expressed it in hectograms?
4. I have a soda bottle that contains 2 liters of Pepsi. How could I express this volume as cm^3 ?

5. What is the density of a stone if its mass is 42 g and its volume is 14.7 cm³?

6. I have a piece of a gold bar that has a volume of 18 cm³ and has a density of 19.3 g/cm³. What is its mass?

7. What is the volume of a piece of balsa wood that has a density of .12 g/cm³ and a mass of 75 g?

8. An oilcan contains 1200 mL of oil with a mass of 240 g. What is the density of the oil?

9. What volume is occupied by 400 g of water? (Water has a density of 1.0 g/mL)