Name:_____

DENSITY WORKSHEET #1

$D = \frac{m}{V}$	$m = DV$	$V = \frac{m}{D}$
m = mass (units are g) V = volume (units are mL or cm^3) D = density (units are g/mL)		

1. Find the density of tin if 13.0 g has a volume of 1.78 mL.

2. Find the density of lead if 150 cm^3 has a mass of 1702.5 g.

3. Find the density of air if 1000 mL has a mass of 1.29 g.

4. Find the density of helium if 400 g has a volume of 2241000 mL.

5. Find the mass of 200 cm^3 of gold if its density is 19.3 g/mL.

6. Find the mass of 0.001 cm^3 of uranium given its density is 18.95 g/mL.

7. Find the mass of 5000 mL of hydrogen gas if its density is 0.0000899 g/mL.

8. Find the mass of 2000 cm^3 if copper's density is 8.96 g/mL.

9. What is the volume of 250 g of iron. The density of iron is 7.874 g/cm^3.

10. What is the volume of 250 g of air, given air has a density of 0.00129 g/mL.

11. What is the volume of 250 g of mercury given mercury's density is 13.55 g/mL

12. A young man named John, wants to but his girlfriend a gold ring. He goes to Bob's Jewellers and looks at a couple of rings. He likes one ring in particular, but before he buys it he wants to make sure it is real gold. The ring has a mass of 29.8 g. He then takes a graduated cylinder and performs a displacement experiment and comes to the conclusion that the ring occupies a volume of 2.64 mL. Is the ring real gold?

Answers:

1. 7.30 g/mL	2. 11.35 g/mL	3. 0.00129 g/mL
4. 0.000178 g/mL	5. 3860 g	6. 0.01895 g
7. 0.4495 g	8. 17920 g	9. 31.75 mL
10. 193798 mL	11. 18.45 mL	