

Name: _____

DENSITY WORKSHEET #2

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

Before calculating:

units for mass must be converted to g

units for volume must be converted to mL (or cm³)

1. Find the density of tin if 0.065 kg of tin has a volume of 0.0089 L.
2. Find the density of lead if 0.340 kg has a volume of 30 mL.
3. Find the density of air if 1.0 L has a mass of 1290 mg.
4. Find the density of helium if 0.4 kg has a volume of 2.241 mL
5. If the density of gold is 19.3 g/mL find the mass in g of 1.6 L of gold.
6. If the density of uranium is 18.95 g/mL find the mass in mg of 25 μ L of uranium.
7. Find the mass in mg of 4.0 L of hydrogen if the density of hydrogen is 0.0000899 g/mL
8. Find the mass in kg of 25 L of copper if the density of copper is 8.96 g/mL.
9. What is the volume of 25 mg of iron in μ L given that the density of iron is 7.874 g/mL.
10. What is the volume 12.0 kg of air in kL if the density of air is 0.00129 g/mL
11. What is the volume in kL of 1.0 Mg of mercury if the density of mercury is 13.55 g/mL
12. 5 kg of a plastic has a volume of 4.8 L. Water has a density of 1 g/mL. Will this plastic float on water or sink?

- Answers:**
- | | | |
|---------------|---------------|------------------|
| 1. 7.30 g/mL | 2. 11.33 g/mL | 3. 0.00129 g/mL |
| 4. 178.4 g/mL | 5. 30880 g | 6. 473.75 mg |
| 7. 359.6 mg | 8. 224 kg | 9. 3.175 μ L |
| 10. 9.302 kL | 11. 0.0738 kL | |