Melting Points and Boiling Points of Metals
Farenheit, Celsius, and Kelvin Measures

The melting point and boiling point on each of the following metals is given in either Farenheit or Celsius. Fill in the rest of the table, showing all your work. Use the back of the paper if necessary.

Metal	Melting Point in Farenheit	Melting Point in Celsius	Melting Point in Kelvin	Boiling Point in Farenheit	Boiling Point in Celsius	Boiling Point in Kevin
1. Aluminum	1217	658.3	931.3	4442	2450	2723
2. Copper	1981	1083	1356	4703	2595	2868
3. Gold	1945	1063	1336	5380	2971	3244
4. Iron	2786	1530	1803	5430	2999	3272
5. Lead	621	327	600	3137	1725	1998
6. Nickel	2646	1452	1725	4950	2732	3005
7. Silver	1761	961	1234	4010	2210	2483
8. Tin	448	231	504	4120	2271	2544
9. Tungsten	5432	3000	3273	10706	5930	6203
10. Zinc	786	419	692	1663	906	1179

Chemistry

Name:
Date: **KEY**
Period:

DENSITY CALCULATIONS PRACTICE PROBLEMS

Solve the following problems involving density calculation and be sure to have the proper number of significant digits. Please show units where appropriate. Note that the final answers are at the bottom of the page in small font.

Formulas For Density Calculations

1) Density = Mass/Volume (D= M/V)   2) Volume = Mass/Density (V= M/D)

3) Mass = Density × Volume (M = D × V)

1) Wood has a density of 5.53g/cm^3. What must the volume of 33.3 g of wood?

$$V = \frac{m}{D} \qquad V = \frac{33.3\,g}{5.53\,g/cm^3} \quad = \quad 6.02\,cm^3$$

2) Copper has a density of 4.44 g/cm^3. What is the volume of 2.78g of copper?

$$V = \frac{m}{D} \qquad V = \frac{2.78g}{4.44\,g/cm^3} \quad = \quad 0.626 \quad cm^3$$

3) Sodium has a density of 1.95 g/cm^3. What is the volume of 56.2g of sodium?

$$V = \frac{m}{D} \qquad V = \frac{56.2g}{1.95\,g/cm^3} \quad = \quad 28.8 \quad cm^3$$

4) What is the density of a piece of iron that has a mass of 59.8g and a volume of 2.08 cm^3?

$$D = \frac{M}{V} \qquad D = \frac{59.8g}{2.08\,cm^3} \quad = \quad 28.8 \quad g/cm^3$$

5) What is the density of mercury that has a mass of 39.6 g and a volume of 9.00 cm^3?

$$D = \frac{m}{V} \qquad D = \frac{39.6g}{9.00\,cm^3} \quad = \quad 4.40 \quad g/cm^3$$

6) Granite has a density of 4.67 g/cm^3. What is the mass of 46.8 cm^3 of granite?

$$M = D \times V \qquad M = 4.67\,g/cm^3 \times 46.8\,cm^3 = 219 \quad g$$

7) Corn oil has density of 6.89 g/cm^3. What is the mass of 34.0 cm^3 of corn oil?

$$M = D \times V \qquad M = 6.89\,g/cm^3 \times 34.0\,cm^3 = 234 \quad g$$