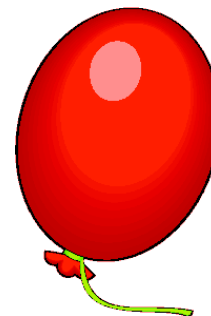


Name: _____ Date: _____
Chemistry

Worksheet

Density and Specific Gravity



Density is the ratio of mass to volume or mass divided by volume. Density is a physical property that compares how **massive** something is as compared to its **volume**.

Formula:

The **specific gravity** of a substance is a comparison (ratio) of its density to the density of water. Therefore, specific gravity is the density of a substance divided by the density of water. Since water has a density of 1.0 gram per milliliter and all of the units cancel, specific gravity is the same number as density but without any units. Specific gravity is unit less.

DIRECTIONS: Read each problem carefully, then write an equation and solve. Show your work.

_____ 1. Calculate the density of chalk if a 1.33 mL sample weighs 3.18 grams.

_____ 2. If the density of iron is 7.87 g/cm^3 , what volume will 50.0 grams of iron occupy?

_____ 3. What will be the mass of 50.0 mL of iron?

_____ 4. 127 mL of turpentine are found to weigh 114.3 grams. What is the specific gravity?

**"Whenever you do a thing, act as if all the world were watching."
-- Thomas Jefferson**