

DENSITY Calculations

Name _____

Directions: use the Magic Triangle to solve the following problems.

Draw Magic
Triangle HERE



1. What's the density of a rock that has a mass of 35 grams and a volume of 7.0 cubic centimeters?
2. What's the density of an object with a volume of 3.0 milliliters and a mass of 12 grams?
3. What's the density of a rectangular solid whose dimensions are 5.0cm by 4.0cm by 3.0cm and whose mass is 120 grams?
4. A student puts a mineral in a graduated cylinder and the water level rises 5ml. The student masses the sample at 125.5g. What is the mineral's density?
5. A student fills a graduated cylinder to the 35ml line. A mineral is placed into the cylinder and the water level rises to the 42ml line. If the mass of the mineral is 88.2g, what is its density?
6. What is the mass of a 4.0ml sample whose density is 6.1g/ml?
7. $V = 4.0\text{cm}^3$, $D = 2.7\text{g/cm}^3$ $m = ?$
8. What is the volume of a 77.4g object with a density of 8.6g/ml?
9. $D = 5.4\text{g/ml}$, $m = 10.8\text{g}$ $V = ?$
10. How dense is Mr. Ling?
 - a) low density
 - b) 2.9g/ml
 - c) very dense
 - d) huh?