

DENSITY PROBLEMS #1 PROPERTIES OF MATTER

Calculate the density, mass, or volume for the following problems.

For each problem show: A. The correct formula - for EVERY problem.

B. Substitute the given data.

C. Give the answer with the correct units.

1. Find the density of an object that has a mass of 10.0 g and a volume of 2.00 cm³. 2. Find the volume of an object that has a density of .25 g/ml and a mass of 1.5 g.

formula:

formula:

substitution:

substitution:

answer:

answer:

3. Find the mass of an object that has a volume of 6.0 cm³ and density of .33g/ml. 4. What is the density of a substance that has a volume of 2.00 cm³ and a mass of 38.0 g.

formula:

formula:

substitution:

substitution:

answer:

answer:

5. What is the density of a mass of 100. g, that has a length of 5.0cm, width of 1.0cm, and a height of 3.0cm. 6. Water has a density of 1.00 g/ml. If a glass holds 240. ml of water, what is the water's mass.

formula:

formula:

substitution:

substitution:

answer:

answer:

7. A cube measures 2.00 cm on each side. It has a density of 3.00 g/cm³. What is its mass? 8. A piece of metal has a mass of 45.0 g and occupies 9.00 ml of space. What is the metal's density?

formula:

formula:

substitution:

substitution:

answer:

answer: