

Properties of Matter

Investigation 1 Quiz

Name: _____

Date: _____

1. What is the density of a sample that has a mass of 26.5 g and a volume of 3.1 cm³?

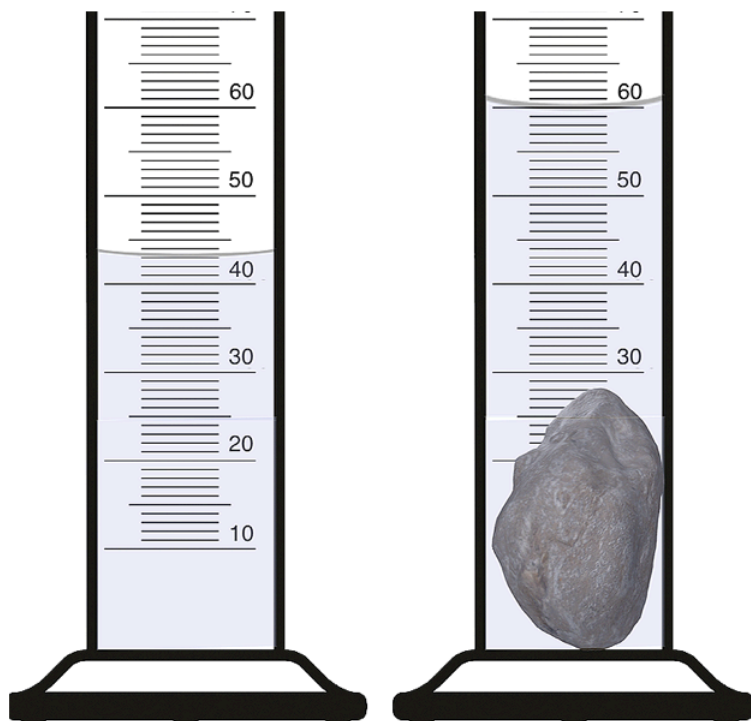
8.5 g/cm³

2. You have two samples that are cubes that measure 3cm X 3cm X 3cm. You place them both in water. Sample A floats while sample B sinks. Which of the two samples has a greater density?

Sample B

3. What is the volume of the sample to the right?

17 cm³



4. You use the volume displacement method and determine that the volume of an irregularly-shaped sample of pure gold is 12.8 cm³. You do not have any equipment to measure the sample's mass. What additional information would you need to calculate the sample's mass anyway? (Its density: gold = 19.3 g/cm³) Its density

Density of gold = 19.3 g/cm (Therefore the sample has a mass of 247.04 g)