

Density Test Practice

1. Suppose you pour two liquids together and one floats on top of the other. Why does that happen? _____

2. What is the operational definition of *density*?

3. What is the operational definition for finding the volume of a regular solid?

4. Suppose you were asked to calculate the density of an unknown liquid in a flask. How would you do it?

5. What is the unit for density of a regular solid? _____

6. What is the unit for density of an irregular solid or liquid? _____

7. Suppose you were given an irregularly shaped rock. How would you calculate the density of the rock?

8. Knowing the density of solids or liquids can be useful. Name at least two uses.

9. A chunk of lead has a volume of 45 cm^3 and a mass of 510 g. What is the density of lead? (Show all steps of your work.)

10. A large beaker contains 500ml of liquid mercury. The mass of the mercury is 6773 g. What is the density of mercury? (Show all the steps of your work.)

11. If you put a chunk of lead into a container of mercury, what would happen? _____

Why do you say this? _____

12. Describe what happens to molecules when their temperature increases. _____

13. When you put hot and cold water together what happens? _____

Why does this happen? _____

14. Explain why a hot air balloon rises. _____
