

Name _____ **KEY**

MASS, Volume and Density Quiz

Concept Matching Match each term with the best description. Use the letters to indicate your choices next to each number.

- j 1. The curved shape at the top of a liquid in a container.
- i 2. The process of submerging an object to determine its volume.
- h 3. A metric unit of solid volume
- d 4. A metric unit of liquid volume
- b 5. The amount of matter in an object.
- g 6. The number of people per square mile.
- k 7. A tool for measuring mass.
- o 8. The density of pure water.
- m 9. A tool for measuring liquid volume.
- n 10. The metric unit for measuring mass.
- c 11. The amount of space an object takes up.
- a 12. The ratio of an object's mass to volume.
- e 13. The formula for finding the volume of a rectangular prism.
- f 14. mass divided by volume
- l 15. A measure of how tightly packed a person's bones are.

- a. Density ✓
- b. Mass ✓
- c. Volume
- d. Milliliter ✓
- e. $l \times w \times h$ ✓
- f. Formula for Density ✓
- g. Population Density ✓
- h. Cubic Centimeter ✓
- i. Displacement ✓
- j. Meniscus ✓
- k. Triple-beam Balance ✓
- l. Bone Density
- m. Graduated Cylinder ✓
- n. Gram
- o. $l/g/mL$ ✓

Determine the density for problems 16-20. Circle your answer and remember to include the correct units. Using your knowledge of how density relates to floating and sinking, **COLOR** each part of the picture to match the correct color for each answer.

16. Mass 9 grams, Volume 12 cm^3 **ORANGE**
 $D = m \div v$
 $D = 9g \div 12cm^3$ **0.75 g/cm^3**
 $D = 0.75g/cm^3$
17. Mass 56 grams, Volume 40 mL **YELLOW**
 $D = m \div v$
 $D = 56g \div 40mL$ **1.4 g/mL**
 $D = 1.4g/mL$
18. Mass 37.5 grams, Volume 15 cm^3 **PURPLE**
 $D = m \div v$
 $D = 37.5g \div 15cm^3$ **2.5 g/cm^3**
 $D = 2.5g/cm^3$
19. Mass 15 grams, Volume 15 mL **BLUE**
 $D = m \div v$
 $D = 15g \div 15mL$ **1 g/mL**
 $D = 1g/mL$
20. Mass 19.2 grams, Volume 16 cm^3 **PINK/RED**
 $D = m \div v$
 $D = 19.2g \div 16cm^3$ **1.2 g/cm^3**
 $D = 1.2g/cm^3$

