Name ISE4

Date _____ Class _____

States of Matter Practice Quiz

Directions: Match the correct description with the correct state of matter. Write the letter in the space provided.

a. solid   b. liquid   c. gas

___a___ 1. Particles do not move fast enough to overcome the strong attraction between them.
___c___ 2. Particles move independently of each other.
___b___ 3. Particles are close together but can slide past one another.
___a___ 4. Particles are close together and vibrate in place.
___c___ 5. Particles move fast enough to overcome nearly all of the attraction between them.
___a___ 6. Particles are held tightly in place by other particles.
___c___ 7. Changes volume to fill container.
___b___ 8. Changes shape when placed in a different container
___c___ 9. Amount of empty space can change
___b___ 10 Has surface tension and viscosity

Directions: Circle the letter of the best answer to each question.

6. Which of the following statements best describes the particles of a liquid?
   a. The particles are far apart and moving fast.
   b. The particles are close together but moving past each other.
   c. The particles are far apart and moving slowly.
   d. The particles are closely packed and vibrating in place.

7. A gas
   a. has a definite volume but no definite shape.
   b. has a definite shape but no definite volume.
   c. has fast-moving particles.
   d. has particles that are always close together.

8. The atoms and molecules in matter
   a. are attracted to one another
   b. are constantly moving
   c. move faster at higher temperatures
   d. all of the above

9. Observe the diagram to the right. Identify as a solid, liquid, and gas.
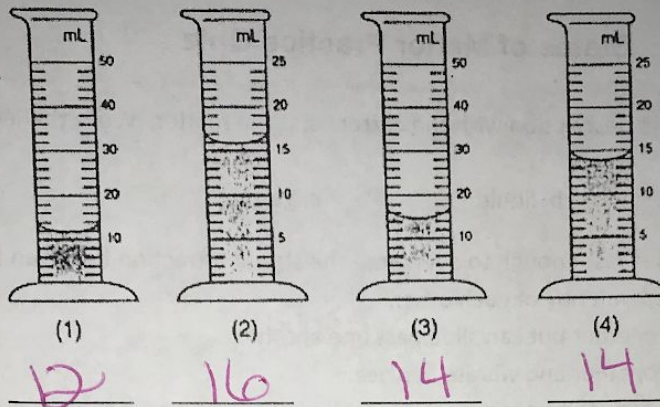   A: solid
   B: liquid
   C: gas

A   B   C

10. Directions: Determine the volume of water in each of the following graduated cylinders:

(1)   (2)   (3)   (4)

_12_   _16_   _14_   _14_

11. What is the unit of measurement for liquids?
   a. millimeters (mm)
   b. cubic centimeters (cm³)
   c. centimeters (cm)
   d. milliliters (mL)
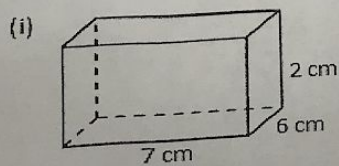
12. What is the unit of measurement for solids?
   a. millimeters (mm)
   b. cubic centimeters (cm³)
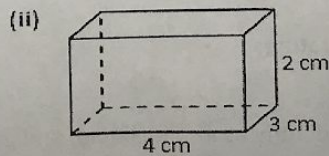   c. centimeters (cm)
   d. milliliters (mL)

Directions: Find the volume of the following objects.

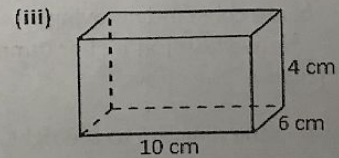| Object	Starting Volume (mL)	Ending Volume (mL)	Volume of Objects cm³
13. marble	15	18	3
14. Ice cube	25	26	1
15. Toy car	10	30	20
16. Toy soldier	20	33	13

Directions: Calculate the volume of each cube below:

(i) 2 cm 6 cm 7 cm

84 cm³

(ii) 2 cm 3 cm 4 cm

24 cm³

(iii) 4 cm 6 cm 10 cm

240 cm³