

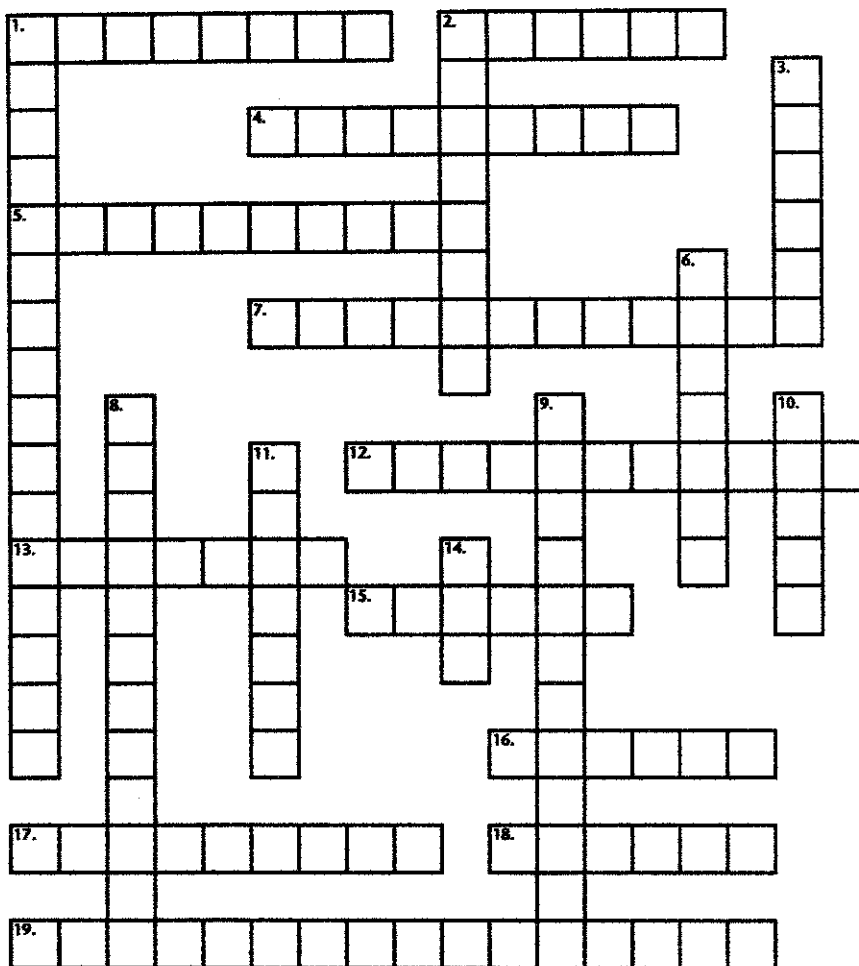
Chapter 8

CHAPTER REVIEW

● Solids, Liquids, and Gases

Part A. Vocabulary Review

Solve the following crossword puzzle using the clues provided.



Across

1. Water that contains such high levels of unwanted materials that it is unacceptable for drinking is ____.
2. gaslike mixture of positively and negatively charged particles
4. law which states that if the volume of a container of gas is decreased, the pressure of the gas will increase provided the temperature does not change (2 words)
5. The buoyant force on an object in a fluid is equal to the weight of the fluid displaced by the object: ____ principle.
7. The amount of energy needed to change a material from a liquid to a gas is the heat of ____.
12. changing of a liquid to a gas gradually at temperatures below the boiling point
13. repeating geometric arrangement of the particles in a solid
15. Solid, liquid, gas, and plasma are the ____ of matter.
16. SI unit of pressure
17. person who stated that pressure exerted by a fluid decreases as the velocity of the fluid increases
18. state of water at 25°C
19. refers to matter expanding as it gets hotter and contracting when it cools (2 words)

Chapter 9 Review (continued)

Part B. Concept Review

Determine whether the following mixtures are homogeneous or heterogeneous.

1. raisins and cereal _____
2. tap water _____
3. milk _____
4. smog _____
5. vegetable soup _____
6. State the law of conservation of mass. This law applies to physical changes as well as chemical changes. With this law in mind, explain what happens to the mass of 18 mL of liquid water when it vaporizes to form about 22 L of water vapor.

In the blank on the left, label each of the following as a physical property, physical change, chemical property, or chemical change.

- _____ 7. sharpening a pencil
- _____ 8. flammability of a substance
- _____ 9. color of an object
- _____ 10. inflating a balloon
- _____ 11. freezing point of water
- _____ 12. melting of copper metal
- _____ 13. corrosion of bicycle frame
- _____ 14. fragrance of a flower
- _____ 15. formation of pollutants