Name:

Solids, Liquids, and Gases

Use your book to help you fill in the blanks.

**How does heat affect the state of matter?**

1. The measure of the average amount of kinetic energy of the atoms and molecules in a material is .

2. Temperature determines the of most matter.

3. What a liquid absorbs enough energy, it becomes a(n) .

4. A liquid becomes a when it loses enough energy.

5. A substance changes directly from a solid to a gas during .

6. The high-energy state of matter in which the electrons and nucleus of each atom have separated is called .

**What is a melting point?**

7. The temperature at which a solid changes to a liquid is the .

8. The process by which a gas changes to a liquid is called .

9. The melting point of a substance is the same temperature as its .

10. Water is different from other substances in that it when heated.

11. When a(n) absorbs enough energy to reach its boiling point, it rapidly changes to a gas.

12. Boiling and are types of vaporization.

**What is pressure?**

13. The force exerted by a gas on its container is .

14. What a gas is cooled at a constant pressure, its molecules move more and its volume will

What are other physical changes of matter?

15. Cutting a copper wire in half is an example of a change because the copper is still copper.

16. When salt is placed in water, the salt particles are separated by water particles in a process called .

17. Heating a liquid the dissolving process.

Match the correct letter with the description.

a. boiling point b. freezing point c. melting point d. physical change

e. pressure f. sublimation g. temperature h. vaporization

1. the force exerted when gas particles strike the inner surface of their container.

2. the process by which a liquid is changed to a gas

3. the temperature at which a solid changes to a liquid

4. point at which a liquid absorbs enough energy to rapidly become a gas

5. the measure of how much kinetic energy is in a substance

6. cutting a piece of paper into hundreds of smaller pieces to make confetti

7. the point at which a liquid becomes a solid

8. the process in which a solid changes directly to a gas without becoming a liquid