

## 8th Grade Physical Science Chapter 3

### The States of Matter

1. Which of the following statements best describes the particles in a gas?

- The particles move quickly and are far apart.
- The particles conduct electric current.
- The particles are in an orderly, three-dimensional arrangement.
- The particles are close together and slide past each other.

2. A puddle of water seems to disappear from the pavement. This is an example of

- boiling.
- evaporation.
- freezing.
- melting.

3. In which state of matter do the particles have the least amount of energy?

- gas
- liquid
- solid
- plasma

4. Condensation is an exothermic reaction. This means that

- energy is created.
- energy is destroyed.
- energy is absorbed.
- energy is released.

5. If you increase the pressure on a sample of gas without changing the temperature,

- the volume of the gas will increase.
- the volume of the gas will decrease.
- the gas particles will move faster.
- the gas particles will stop moving.

6. When a substance undergoes a change of state, the temperature of the substance

- always increases.
- always decreases.
- can either increase or decrease.
- never increases or decreases.

7. What property of liquids causes water to form beads when it is dripped onto a sheet of wax paper?

- pressure
- surface tension
- viscosity
- volume

8. Which of the following statements best describes the motion of particles during boiling?

- The particles move faster and farther apart.
- The particles become more attracted to each other.
- The particles move slower and closer together.
- The particles break apart.

9. How are the melting point and freezing point of a substance related?

- They are equal to each other.
- The melting point is greater than the freezing point.
- The melting point is less than the freezing point.
- The temperatures are not related.

10. If you place an inflated balloon in a freezer, what will happen to its volume?

- The volume will increase.
- The volume will decrease.
- The volume will not change.
- There is not enough information to determine the answer.

11.  is related to the speed of the particles in a substance.

---

12. A(n)  change is one in which energy is absorbed.

---

13. Dry ice changes from a solid to a gas during a change of state called .

---

14. Particles vaporize throughout a liquid during boiling, but vaporize only at the surface of a liquid during .

---

15.  is a property of gases that is equal to the force exerted on a given area.