

## Chapter 2 Vocabulary Science

1. **Boiling**- When the internal pressure of a liquid matches the surrounding pressure.
2. **Gas**- Phase of matter with no definite shape, no definite volume, no definite size. A gas fills whatever container it is in. Particles move rapidly and randomly.
3. **Liquid**- Phase of matter with no definite shape, no definite size, but does have a definite volume. Particles move past each other easily.
4. **Solid**- Phase of matter that has a definite size, definite shape, and definite volume. Particles vibrate in a “fixed” position.
5. **Plasma**- Phase of matter that is a gas which can conduct electricity. Rare on earth, but the most common phase of matter in the universe.
6. **Latent Heat**- Energy required for a substance to change phase. Sometimes referred to as “hidden heat”.
7. **Melting**- To change from the solid phase to the liquid phase. Substance must gain energy.
8. **Freezing**- To change from the liquid phase to the solid phase. Substance must lose energy.
9. **Vaporization**- To change from a liquid to a gas at temperatures which are at or above the boiling point of the liquid.
10. **Evaporate**- To change from a liquid to a gas at temperatures which are below the boiling point of the liquid.
11. **Sublimation**- To change from the solid phase directly to the gas phase without a liquid intermediate phase.
12. **Freezing Point**- Temperature at which a liquid changes to a solid.
13. **Melting Point**- Temperature at which a solid changes to a liquid.
14. **Boiling Point**- Temperature at which a liquid changes to a gas.
15. **Condensation**- To change from a gas to a liquid. Substance must lose energy.
16. **State of Matter**- Phase. Solid, liquid, gas, plasma.
17. **Crystalline Solid**- Matter with a regular repeating pattern to the atoms or molecules. Melts and freezes at a specific temperature.

18. **Amorphous Solid**- Matter with no regular repeating pattern to the atoms or molecules. Melts and freezes over a range of temperatures.
19. **Pressure**- Amount of force acting over a given area.  $P=F/A$
20. **Charles' Law**- A change of temperature in a container of gas causes a change in volume that is directly related to the temperature change, if the pressure remains the same (ex. double the temperature = double the volume).
21. **Boyles' Law**- The pressure change in a container of gas is inversely proportional to the change in volume if the temperature remains the same. (ex. double the volume = half the pressure).
22. **Endothermic**- Requires the addition of heat energy to cause the phase change or maintain the chemical reaction.
23. **Exothermic**- Heat energy is given off by the phase change or the chemical reaction.