Name: #:

**Unit 3 Vocabulary: Matter Definitions**

1. Physical change- when an object undergoes a change that does not alter their chemical properties.

2. Chemical change- when a substance reacts with another substance and a newsubstance is formed.

3. Physical property- property that does not change the chemical nature of matter. Cutting an apple can go back.

4. Chemical property- property that does change the chemical nature of matter. A rotting apple can’t change back.

5. Matter: is anything that has mass and takes up space.

6. Solid- a phase of matter that has a definite shape and volume.

7. Liquid- a phase of matter that has a definite volume but no definite shape.

8. Gas- matter with no definite volume or shape.

9. Plasma- a phase of matter that exists at extremely high temperatures; a super-heated gas.

10. Energy: is never created or destroyed. It can only be transformed from one energy to another.

11. Phase change- a physical change that results in a substance changing from one state to another.

12. Heating curve: A diagram to help understand how matter changes state.

13. Melting- when a substance changes from a solid to a liquid.

14. Vaporization: when a liquid changes to gas. There are 2 types, evaporation and boiling.

15. Evaporation- vaporization that only takes place on the surface of a liquid. Like what happens to a puddle on a warm day.

16. Boiling: vaporization that takes place both below and at the surface of a liquid. Like boiling water.

17. Condensation- is the reverse of vaporization. It’s when a gas changes into a liquid.

18. Freezing- is the reverse of melting. It’s when a liquid changes to a solid.

19. Sublimation- when matter changes from a solid directly into a gas and skips the liquid state. Like when snow disappears when it’s below freezing.

20. Deposition: is the opposite of sublimation. When matter changes from gas to a solid and skips the liquid state. An example is when in freezing air water vapor changes directly into ice without first becoming a liquid.

21. Kinetic molecular theory- theory that describes that all matter is made of particles that are in motion.