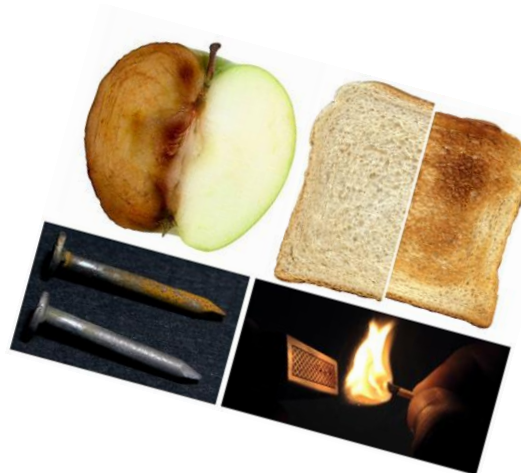


Physical & Chemical Changes

Terms:

1. Amorphous solid
2. Boiling
3. Chemical change
4. Condensation
5. Crystalline solid
6. Endothermic change
7. Exothermic change
8. Evaporation
9. Freezing
10. Gas
11. Liquid
12. Melting
13. Physical change
14. Plasma
15. Solid
16. Sublimation
17. Vaporization
18. Viscosity
19. Boyle's Law
20. Charles's Law

stretch
squash
twist
freeze
bend
heat
PHYSICAL CHANGE



NYS Science Standards

Key Idea 3: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity

- 3.1a Substances have characteristic properties. Some of these properties include color, odor, phase at room temperature, density, solubility, heat and electrical conductivity, hardness, and boiling and freezing points.
- 3.1c The motion of particles helps to explain the phases (states) of matter as well as changes from one phase to another. The phase in which matter exists depends on the attractive forces among its particles.
- 3.1d Gases have neither a determined shape nor a definite volume. Gases assume the shape and volume of a closed container.
- 3.1e A liquid has definite volume, but takes the shape of a container.
- 3.1f A solid has definite shape and volume. Particles resist a change in position.
- 3.2a During a physical change a substance keeps its chemical composition and properties. Examples of physical changes include freezing, melting, condensation, boiling, evaporation, tearing, and crushing.
- 3.2c During a chemical change, substances react in characteristic ways to form new substances with different physical and chemical properties. Examples of chemical changes include burning of wood, cooking of an egg, rusting of iron, and souring of milk.
- 3.3b Atoms and molecules are perpetually in motion. The greater the temperature, the greater the motion.
- 3.3c Atoms may join together in well-defined molecules or may be arranged in regular geometric patterns.

Name _____
Science _____



Date _____
Physical & Chemical Changes Terms

Directions: Using your textbook glossary, match the definition to the correct vocabulary term.

- | | |
|-----------------------------|--|
| _____ 1. Amorphous solid | A. A change in which one or more substances combine to form new substances. |
| _____ 2. Boiling | B. A change in which energy is taken in. |
| _____ 3. Boyle's Law | C. A solid made up of particles that are not arranged in a regular pattern. |
| _____ 4. Charles's Law | D. A change in which energy is given off. |
| _____ 5. Chemical change | E. The process that occurs when vaporization takes place inside a liquid as well as on the surface. |
| _____ 6. Condensation | F. A principle that describes the relationship between the pressure & volume of a gas at constant temperature. |
| _____ 7. Crystalline solid | G. The change from the gaseous to the liquid state of matter. |
| _____ 8. Endothermic change | H. A solid that is made up of crystals in which particles are arranged in a regular, repeating pattern. |
| _____ 9. Exothermic change | I. The process that occurs when vaporization takes place only at the surface of a liquid. |
| _____ 10. Evaporation | J. A principle that describes the relationship between the temperature & volume of a gas at constant pressure. |
| ----- | |
| _____ 11. Freezing | K. The change from the liquid to the solid form of matter. |
| _____ 12. Gas | L. A state of matter that has no definite shape but a definite volume. |
| _____ 13. Liquid | M. The change in state from a solid to a gas without passing through the liquid stage. |
| _____ 14. Melting | N. The change of state from a liquid to a gas. |
| _____ 15. Physical change | O. A liquid's resistance to flow |
| _____ 16. Plasma | P. A state of matter with no definite shape or volume. |
| _____ 17. Solid | Q. A change in a substance that does not change its identity. |
| _____ 18. Sublimation | R. The change from the solid to the liquid state of matter. |
| _____ 19. Vaporization | S. A gas-like state of matter consisting of free electrons & atoms stripped of their electrons. |
| _____ 20. Viscosity | T. A state of matter that has definite shape & volume. |