**Matter Vocabulary**

1. **Matter**: Anything that has mass and takes up space
2. **Atom**: The smallest pieces of matter.
3. **Element**: Different types of atoms. Each element has a different number of protons / mass.
4. **Periodic** Table: A display of all the known elements arranged by category and size.
5. **Solid**: A main state of matter that has a rigid definite shape, the atoms are packed tightly together in a neat pattern, has the least heat energy, and is the most dense.
6. **Liquid**: A main state of matter that takes the shape of its container, the atoms are touching and able to flow around each other; has an intermediate heat energy and is usually less dense than solid.
7. **Gas**: A main state of matter that takes the shape and volume of its container, the atoms are spread out and moving quickly; has the most heat energy and is least dense.
8. **Phase** **Change**: A change from one state (solid or liquid or gas) to another without a change in chemical composition
9. **Heat** **Energy**: The disorderly motion of particles that increases with temperature.
10. **Melting** **Point**: The temperature at which a solid turns to liquid at a fixed pressure. Equal to freezing point.
11. **Freezing** **Point**: The temperature at which a liquid turns to a solid at a fixed pressure. Equal to melting point.
12. **Boiling** **Point**: The temperature at which a liquid turns to a gas at fixed pressure. Equal to condensing point.
13. **Condensing** **Point**: The temperature at which a gas turns to a liquid at fixed pressure. Equal to boiling point.
14. **Evaporation**: The process of liquid turning into a gas. (ie. Boiling water eventually disappears)
15. **Condensation**: The change of the physical state of matter from gas phase into liquid phase. (ie. Cold soda can “sweating”)
16. **Chemical** **Properties** **of** **Matter**: Properties that have to do with how the atoms of a substance either form or break bonds to create new molecules.
17. **Physical** **Properties** **of** **Matter**: Properties that can be measured or observed without changing the chemical makeup of matter; about energy and phase changes.
18. **Density**: A measure of how much matter is in a certain volume. Density= mass/volume; (g/cm3)
19. **Solubility**: A measure of the amount of solute that can be dissolved in a certain amount of solvent under certain conditions.
20. **Solute**: A substance that is dissolved in a liquid (ie. Salt, sugar)
21. **Solvent**: The liquid in which a solute is dissolved into solution. (ie. water)