Science Vocabulary

Unit: **Matter**

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| Matter | *Anything that has mass and takes up space (scientific name for stuff)* |
| *Atom* | *Basic building block of matter. The simplest and smallest particle of an element that still has the same properties of that element* |
| *Molecule* | *Particle made up of two or more atoms* |
| *Element* | *A pure substance made of all the same type of atoms.* |
| *Compound* | *A substance made up of two or more different kinds of atoms* |
| *Electron* | *A negatively charged particle that orbits the nucleus* |
| *Nucleus* | *The center of an atom* |
| *Proton* | *A positively charged particle in the nucleus* |
| *Neutron* | *A particle with no charge in the center of the nucleus* |
| *Mass* | *The amount of matter in an object or space* |
| *Weight* | *The measure of gravity (Weight measures mass on earth)* |
| *Volume* | *The amount of space an object (solid, liquid, gas) takes up* |
| *Kinetic Theory of Matter* | *All particles in all matter are in constant motion* |
| *Vibrate* | *A rapid back and forth motion* |
| *Solid* | *An object where tightly packed molecules vibrate back and forth but hold their position.* |
| *Liquid* | *A substance where tightly packed molecules move freely past and around each other* |
| *Gas* | *A substance where molecules are spread out moving rapidly.* |
| *Plasma* | *Super heated gas (stars)* |
| *Physical Properties* | *Properties that do not change the molecular formula of a substance (weight, phase, mass, volume)* |
| *Chemical Properties* | *Properties that do change the molecular formula of a substance (makes a new substance)* |
| *Heat* | *Movement of energy from high to low.* |
| *Expand* | *Getting larger* |
| *Contract* | *Getting Smaller* |
| *Phase/State* | *Solid, Liquid, or Gas (state is determined by temperature and molecule movement.* |
| *Phase Change* | *When matter changes form one state to another (example, ice melting going from a solid to a gas)* |
| *Condense* | *Phase Change, gas to a liquid* |
| *Evaporate* | *Phase Change, liquid to a gas* |
| *Boiling Point* | *Exact temperature water changes into a gas* |
| *Freezing Point* | *Exact temperature a liquid becomes a solid* |
| *Melting Point* | *Exact temperature a solid becomes a liquid* |
| *Sublimation* | *Phase Change, solid to gas* |
| *Density* | *A measure of the amount of matter in a defined space.* |
| *Physical Change* | *A change that does not change the molecule formula.* |
| *Chemical Change* | *A change that impacts the molecules in such a way that you have a new substance.* |
| *Pure Substance* | *A substance that made up of all the same atoms, or all the same molecules (water, gold, any element)* |
| *Solubility* | *A measure of a substances ability to dissolve into a solvent* |
| *Solute* | *The substance being dissolved* |
| *Solvent* | *The substance (usually liquid) doing the dissolving* |
| *Suspension* | *A mixture where the particles do not dissolve and settle to the bottom* |
| *Dilute* | *A solution that is considered weak (not much solute)* |
| *Concentrated* | *A solution that is considered strong (lots of solute)* |
| *Solution* | *A mixture where a solvent is dissolved* |
| *Mixture* | *Anything you can combine* |
| *Gravity/Weight* | *Gravity is a force measured by weight* |
| *Colloid* | *A suspension with large particles that do not settle out. Usually milky and blocks light* |
| *Homogenous* | *A mixture that is the same throughout* |
| *Heterogeneous* | *A mixture that is different though out* |
| *Granulated* | *A size larger than powder (grain size)* |
| *Buoyancy* | *The measure of an objects ability to float on water* |
| *Saturated* | *A solvent can no longer dissolve any more solute* |
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