

## Weeks 6 & 7: "The Properties of Matter" Vocabulary Help

*NB: The below definitions are "starting points" only. Be sure to update with your own clarifying notes, definitions and examples from your readings and from class discussions to fully prepare for quizzes and tests!*

<b>Matter</b>	Anything that has mass and takes up space
<b>Volume</b>	A measure of the size of a body or region in three-dimensional space (know how to find for irregular shape or rectangular prism)
<b>Meniscus</b>	The curve at a liquids surface by which one measures the volume of the liquid
<b>Mass</b>	A measure of the amount of matter in an object
<b>Weight</b>	A measure of the gravitational force exerted on an object; its value can change with the location of an object in the universe
<b>Newton (N)</b>	The SI unit which measure weight (to convert weight to mass, recall that 1 N = 100g )
<b>Inertia</b>	The tendency of an object to resist being moved or, if the object is moving, to resist a change in speed or direction until an outside force acts on the object
<b>Density</b>	The ratio of the mass of a substance to the volume of the substance ( $D=m/v$ ); Know definition, formula and units!
<b>Density of H<sub>2</sub>O</b>	1.00 g/cm <sup>3</sup>
<b>Chemical Property</b>	A property of matter which describes a substance's ability to participate in chemical reactions; Know list of chemical properties!
<b>Chemical Change</b>	A change that occurs when one or more substances change into entirely new substances with different properties
<b>Physical Change</b>	A change of matter from one form to another without a change in chemical properties
<b>Physical Property</b>	A characteristic of a substance that does not involve a chemical change, such as density, color, or hardness; Know list of physical properties!
<b>Thermal Conductivity</b>	The rate at which a substance transfers heat.
<b>State</b>	The physical form in which a substance exists
<b>Solubility</b>	The ability of one substance to dissolve in another at a given temperature and pressure
<b>Ductility</b>	The ability of a substance to be pulled into a wire
<b>Malleability</b>	The ability of a substance to be rolled or pounded into thin sheets
<b>Characteristic Property</b>	The properties that are most useful in identifying a substance because they are always the same no matter what the sample size is; These can be physical or chemical properties (ex. density, solubility, flammability, reactivity)
<b>Three States of Matter</b>	The physical forms of matter, which include solid, liquid, and gas