## Section 3: Chemical Properties

**chemical properties** – a property of matter that describes a substance's ability to participate in chemical reactions

flammability – the ability of a substance to burn

**reactivity** – the ability of two or more substances to combine and form one or more new substances

**characteristic properties** – properties that are most useful in identifying a substance

physical – density and solubility

chemical – flammability and reactivity

**chemical changes** – process by which substances actually change into new substances

example – food digestion, baking a cake, and battery

**composition** – the type of matter that makes up the object and the way that the matter is arranged in the object

Physical changes do not change the composition of the substance. (Grinding baking soda.) (Water is two hydrogen atoms and one oxygen atom,  $H_2O$ )

Chemical changes do alter the composition of a substance.