

Physical & Chemical Properties and Changes

Properties

- Every substance has a set of characteristics that identify it
- Scientists call these characteristics an object's **properties**
- There are two main categories of properties:
 - **Physical Properties**
 - Describe what an object looks like
 - Color, shape, size, luster (shininess), smell, density and the melting & boiling points
 - **Chemical Properties**
 - Describes how the substance will react with other materials
 - Flammability (how well it will catch on fire)
 - Oxidation (how well it reacts with oxygen)
 - Reactivity (How well it combines with other substances)

Changes

- **Physical Change**-changes the way an object looks, but does not change the object into something else
 - Examples:
 - Ice Melting
 - Chopping a piece of wood
 - Paint peeling off of a bicycle
- **Chemical Change**-atoms in the object are rearranged into a different object
 - Examples:
 - Water combining with carbon dioxide to make sugar
 - Burning a piece of wood
 - A bicycle rusting