**Examples of Physical Properties**Examples of Physical properties are:

* Color (vividness of visual appearance)
* Luster (a shine or glow)
* Hardness (rigid and resistant to pressure)
* Odor (distinctive smell)
* Luminescence (emitting light not caused by heat)
* Conductivity (transmission of heat or electricity or sound)
* Solubility (ability to be dissolved)
* Malleability (capable of being shaped or bent)
* Ductility (easily pulled or stretched into a thin wire)
* Density (the measure of the relative "heaviness" of objects with a constant volume)
* Viscosity (resistance to flow - stickiness)
* Compressibility (made more compact)
* Freezing point (temperature below which a liquid turns into a solid)
* Boiling point (temperature at which the vapor pressure is large enough that bubbles form inside the body of the liquid)
* Melting point (temperature at which the solid melts to become a liquid)
* Crystalline structure (geometric pattern e.g. rectangular, hexagonal)
* Allotropic - Allotropes are forms of an element with different physical and chemical properties occurring in two or more crystalline forms in the same physical state. The physical properties can vary widely with the allotropic form. Example: Forms of Carbon are graphite and diamonds. Diamond is highly transparent. Graphite is opaque and black

In a physical change, the substances are not altered chemically, but merely changed to another phase (i.e. gas, liquid, solid) or separated or combined.

**Examples of Chemical Properties**Examples of chemical properties are:

* Flammability (the ability to catch on fire)
* Toxicity (the ability to be poisonous)
* Radioactivity (giving off ionizing radiation)
* Heat of combustion (amount of heat released when the substance is completely burned)
* Reactivity with water (what happens when a substance reacts with water)
* Reactivity with acids (what happens when a substance reacts with an acid)
* Oxidation (the combination of a substance with oxygen)
* Corrosion (a corrosive substance that will destroy or irreversibly damage another surface)

In a chemical change, the substances are altered chemically and display different physical and chemical properties after the change.