Physical and Chemical Properties and Changes

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MATTER

Anything that has mass & takes up volume.

Physical Property

A characteristics of a substance that can be observed without a new substance being produced.

Examples: malleability, boiling point

Chemical Property

A characteristics of a substance that is observed when one or more new substances are produced.

Examples: combustibility, reacting with acid

Physical vs. Chemical Changes

Physical Changes	**Chemical Changes**
• A change in a substance that does not involve the formation of a new substance. • Original substance **remains the same.**	• A change in a substance that results in the formation of one or more new substances. • New substances have **different properties** from the original substance.
3 types of changes: 1. Change of **<u>form</u>** • Ripping paper • Shaping clay 1. Change of **<u>state</u>** • Liquid to gas • Solid to liquid 1. **Dissolving** • Dissolve sugar in warm water	Some of the visible changes that you can see when a chemical changes takes place: 1. A **new colour** appears. 2. **Heat** or **light** is produced. 3. **Bubbles of gas** formed. 4. A **precipitate (solid)** formed in a liquid. 5. The change is generally **difficult to reverse**.