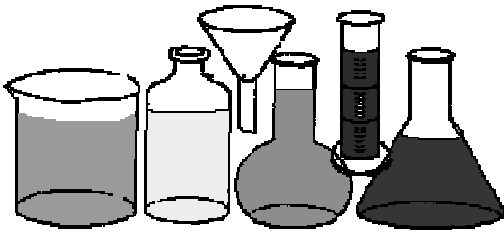


Chemistry 1D
Physical Properties
Chemical Properties and Changes



Quantitative Physical
Properties

- Density (mass/volume ratio)
- Volume
- Length
- Mass
- Boiling point
- Melting point

Qualitative Physical
Properties

- Examples:
 - Color
 - Hardness
 - Texture
 - Odor
 - Sound
 - Magnetism

Chemical Properties

- Chemical Properties describe how a substance reacts:
 - Reacts with water
 - Toxicity
 - Oxidizing agent

Chemical Changes

- During **chemical changes** new substances are formed with different properties than the original substances.
- What is an example of a chemical change?

Signs of Chemical Change

- Change in colour
- New Solid (Precipitate)
- New Gas
- Heat
- Light

All chemical reactions involve **energy**.

- For Example a chemical reaction can produce:
 - Heat
 - Light
 - Electrical energy
 - Sound

Chemical Change Example



- Heating baking soda, sodium bi carbonate, forms carbon dioxide and water. The formation of carbon dioxide is what causes cakes to rise.

We Use Chemical Word Equations to describe Chemical Changes

Sodium Bicarbonate \longrightarrow Water + Carbon Dioxide



Reactant



Products