

What are chemical reactions used for? Cards

| | |
|---|---|
| <p>Chemical reactions are used to make new materials</p> | <p>Chemical reactions are important in biological systems</p> |
| <p><i>enzymes</i> glucose → carbon dioxide + water</p> | <p>Chemical reactions can be used as energy sources</p> |
| <p><i>n</i>(ethene) → polyethene</p> | <p>$\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$</p> |
| <p>1,2-diaminohexane + hexanedioic acid → nylon-6,6</p> | <p>octane + oxygen → carbon dioxide + water</p> |

Plants use energy from the sun to convert water and carbon dioxide into glucose and oxygen.
This process is known as photosynthesis.

haemoglobin + oxygen → oxyhaemoglobin

To make a moulded item out of polyurethane, the two liquid components (polyisocyanate and polyol) are mixed together in exactly the right masses. The exothermic reaction takes a minute.

$\text{Mg} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$

