

Topic 7 - Chemical Reactions

- Different types of chemical reactions can occur when two or more substances combine to form new substances. Corrosion (iron + oxygen + water \rightarrow rust) is this type of chemical reaction.
 - exchange
 - combination
 - displacement
 - decomposition
- A chemical change, which **releases** energy, is called ...
 - exothermic
 - endothermic
 - combustable
 - dangerously reactive
- Chemical reactions can be written as **word equations** which gives the names of all the reactants followed by an arrow which points to the names of all the products.
eg. (**iron + oxygen + water \rightarrow rust**)
The arrow in the word equation indicates ...
 - The rate of the reaction
 - The reactants produced
 - The products produced
 - What is used in the reaction
- A chemical equation may look complicated, but, by knowing what you know now, it should be much easier to understand
$$\text{HC}_2\text{H}_3\text{O}_2(\text{l}) + \text{NaHCO}_3(\text{g}) \rightarrow \text{NaC}_2\text{H}_3\text{O}_2(\text{aq}) + \text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{g})$$
This chemical equation happens when you mix ...
 - vinegar and calcium carbonate
 - carbon dioxide and flavored water
 - calcium carbonate and water
 - vinegar and baking soda
- The following word equation identifies what happens when hydrogen peroxide is left out in the sun. It changes to water and oxygen gas.
 - Water + Oxygen \longrightarrow Hydrogen peroxide
 - Hydrogen peroxide + Energy \longrightarrow Water + Oxygen
 - Water + Energy + Oxygen \longrightarrow Hydrogen peroxide
 - Hydrogen peroxide + Oxygen \longrightarrow Water + Energy
- Use the following chemical reaction word equation to answer the question.
$$\text{wood} + \text{oxygen} \longrightarrow \text{carbon dioxide} + \text{water} + \text{energy released}$$
The reactants in this chemical word equation are ...
 - wood and oxygen
 - wood and energy
 - oxygen and energy
 - carbon dioxide and water
- To treat an injury in sport, **cold packs** are used to reduce the swelling where the injury occurs. These cold packs are examples of ...
 - Endothermic reactions
 - Exothermic reactions
 - Combustion reactions
 - Corrosion reactions