

Definitions and Concepts for WJEC (Eduqas) Chemistry GCSE

## **Topic 7 - Chemistry of Acids**

Definitions in **bold** are for higher tier only

Definitions have been taken, or modified from the <u>WJEC (Eduqas)</u> <u>Specification for GCSE Chemistry, C410, Version 3 January 2019</u>

Acid: Produces hydrogen ions (H+) in aqueous solutions with a pH range between 0 and 7. Acids will react with metals to produce a salt and hydrogen and will react with carbonates to produce a salt, water and carbon dioxide

**Alkali:** Produces hydroxide ions (OH-) in aqueous solutions with a pH range between 7 and 14. Alkalis are water soluble bases.

**Neutralisation:** The reaction in which an acid and a base react together to form a salt and water. Generally, neutralisation reactions are reactions in which hydrogen ions react with hydroxide ions to form water:  $H^+ + OH^- \rightarrow H_2O$ 

**pH scale:** A measure of the acidity or alkalinity of a solution. The scale ranges from 0-14 and can be measured using universal indicator or a pH probe.

Strong acid: An acid which is completely ionised in an aqueous solution so that nearly all the H+ ions are released. Examples of strong acids include hydrochloric, nitric and sulfuric acids.

**Titration:** A technique used where a solution of known concentration is used to determine the concentration of an unknown solution. Titrations can be used to prepare crystals of a soluble salt.

Weak acid: An acid which is only partially ionised in an aqueous solution. This means only a small number of the H+ ions are released. Examples of weak acids include ethanoic, citric and carbonic acids.

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