

Definitions and Concepts for WJEC (Wales) Chemistry GCSE

Topic 2.4 - Chemical Reactions and Energy

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

Definitions have been taken, or modified from the [WJEC \(Wales\) Specification for GCSE Chemistry. 3410. Version 2 March 2019](#)

Activation energy: The minimum amount of energy that particles must collide with to react.

Endothermic reaction: A reaction that takes in energy from the surroundings so the temperature of the surroundings decreases. The energy needed to break existing bonds is greater than the energy released from forming new bonds.

Energy profile: Graph used to show the relative energies of reactants and products, the activation energy and the overall energy change of a reaction.

Exothermic reaction: A reaction that transfers energy to the surroundings so the temperature of the surroundings increases. The energy released from forming new bonds is greater than the energy needed to break existing bonds.

Overall energy change of the reaction: The difference between the sum of the energy needed to break bonds in the reactants and the sum of the energy released when bonds in the products are formed.

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