

Definitions and Concepts for CAIE Biology IGCSE

Topic 5: Enzymes

*Definitions in **bold** are for supplement only*

Active site - A specific region of an enzyme where the substrate binds and the reaction takes place.

Catalyst - A substance that increases the rate of a chemical reaction without being changed itself.

Denaturation - Exposure to high temperatures or extremes of pH, produces a permanent change in the shape of an enzyme's active site that prevents the binding of a substrate.

Enzyme - A biological catalyst that increases the rate of reactions in living organisms.

Enzyme-substrate complex - The temporary complex formed when the substrate binds to the active site of the enzyme.

Rate of reaction - The speed at which reactants are converted into products.

Substrate specificity - The ability of an enzyme to catalyse only a specific reaction or set of reactions which have substrates complementary to the shape of the enzyme.

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