

## Definitions and Concepts for CAIE Biology IGCSE

### Topic 5: Enzymes

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*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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