

## KEY FACTS

- Lock and key: rigid active site. Induced fit: active site moulds around substrate.
- Temperature: increases rate to optimum then denaturation (irreversible)
- pH: extreme pH → denaturation. Each enzyme has own optimum.

## KEY TERMS

Active site	Specific region where substrate binds
Denaturation	Irreversible permanent change in active site shape
Induced fit	Active site changes shape to fit substrate — more accurate model
Lock and key	Rigid active site — substrate fits perfectly

■ EXAM TIP: Edexcel explicitly tests BOTH models. Lock and key = rigid. Induced fit = flexible. Know the difference.