

# Enzymes

## Enzymes

### Biological catalysts

Proteins   Not changed   Speed up reactions

### Active site   **Supplement**

Complementary shape   Substrate to products

### Enzyme-substrate complex and specificity

#### **Supplement**

Substrate binds   One substrate only   Shape and fit

### Temperature

Optimum temperature   Denatured above optimum

### pH

Optimum pH   Denatured at extremes

### Explaining temperature and pH   **Supplement**

Kinetic energy   Effective collisions   Shape and fit lost

### Investigating amylase

Iodine test   Water bath   Time to end point

Rate =  $1000 \div \text{time}$