

Enzymes

Define catalyst.

What is a *denatured* enzyme?

Define enzyme.

Give an example of a catabolic and an anabolic enzyme.

Catabolic:

Anabolic:

Define metabolism.

Describe what is meant by the *active site* of an enzyme.

What is the role of enzymes in plants and animals?

Define *substrate*.

Describe what is meant by *enzyme specificity*.

Define *product*.

Enzymes are made from which biomolecule?

Describe the induced fit model of enzyme action.

Give three advantages of immobilising enzymes.

1.

2.

3.

Describe examples of enzymes used in the following industries:

1. Food / beverages

2. Biofuels

3. Medicine

4. Pharmaceuticals

What are immobilised enzymes?

Give two uses of immobilised enzymes.

1.

2.

What is a bioreactor?

Draw a graph to show how temperature affects enzyme activity.

Draw a graph to show how pH affects enzyme activity.

What is meant by an enzyme's 'optimum pH?'

Describe an experiment to measure the effect of pH on enzyme activity.

Describe an experiment to measure the effect of temperature on enzyme activity.

Describe an experiment to measure the effect of enzyme concentration on enzyme activity.

Describe an experiment to measure the effect of substrate concentration on enzyme activity.

