pH:

pH = measure of the concentration of H^+ ions.

Changing the pH effects the rate at which the enzyme works. The pH change alters the concentration of H^+ and OH^- in the surrounding solution. A small change alters the charges on amino acids that make up the active site which means substrate no longer binds. A large change means the tertiary structure changes and the enzyme denatures due to broken bonds.

Inhibitors:

Substances that slow down the rate of reaction.

Competitive inhibitors are complimentary to the active sites of enzymes so they can fit into the active site and block it. This stops enzyme-substrate complexes from being formed and slows down the rate of the reaction.

Non-competitive inhibitors bind to another place on the enzyme that is not the active site. This causes the enzyme to change the shape of its tertiary structure and changes the shape of the active site which stops enzyme-substrate complexes from forming.

Low temperatures:

When an enzyme works in a temperature less than the optimum it slows down the rate of the reaction, therefore increasing the temperature will increase the kinetic energy meaning that more successful collisions take place and more enzyme-substrate complexes form; the rate of reaction increases.