Once the fuse blows, the circuit is broken.

A fuse is a piece of wire in a circuit which meltes as soon as the current is too high.

A fuse can be a fire risk. Many plugs or circuits are fitted with circuit breakers to avoid this risk.

If the wires leading to and from a light bulb touch each other, there is a sudden increase in current. The fuse is blown. The bulb goes off.

A switch is simply a way of making and breaking a circuit.

A simple circuit is shown. When a switch is in the on position, an electric current flows through the circuit. When a switch is in the off position, the circuit is broken. The bulb stops working.

Most electric wires are made of metal strands coated with plastic or rubber. The electric current flows through the wire. The wire does not conduct plastic.

When a metal wire melts, the electric current stops flowing. The bulb lights up when the fuse melts.

To connect a light bulb to an electricity supply, we need two wires. Electric current flows from the power supply down one wire to the bulb and back along the other wire to the power supply.

Circuits