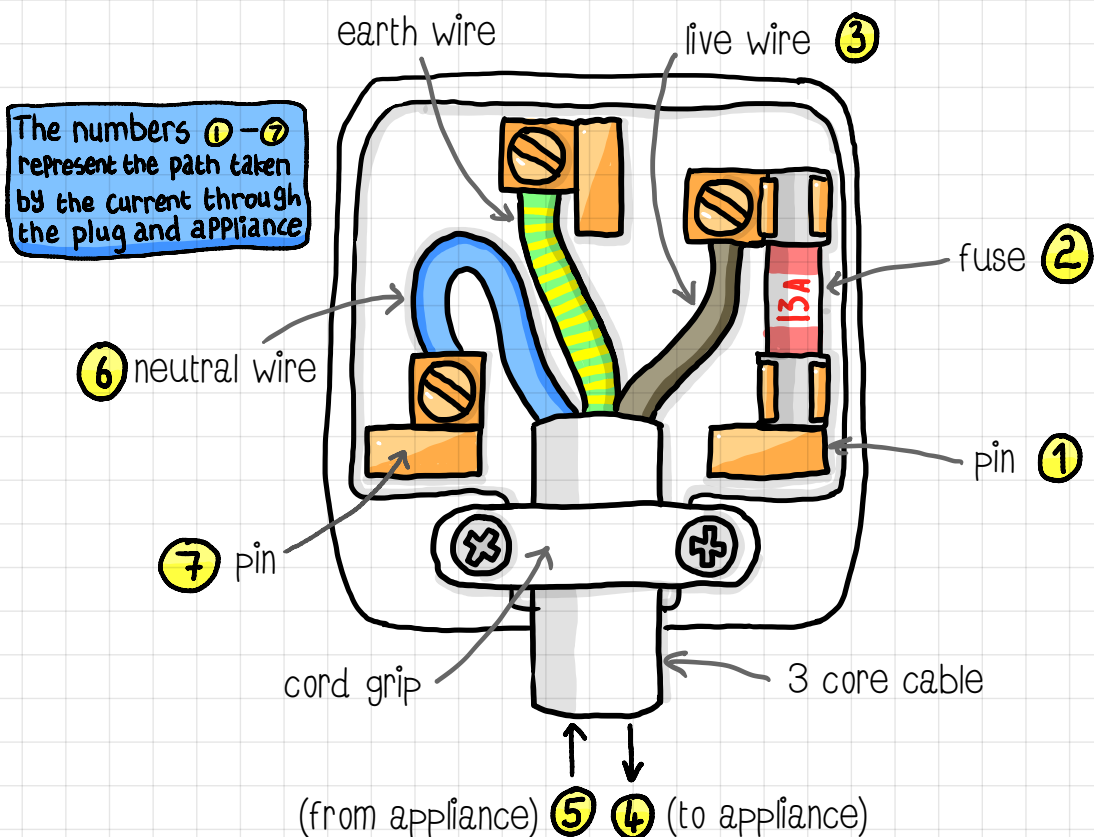


Mains electricity

Three core cable

- ⚠ The UK mains supply is alternating current (AC). Appliances are connected to the mains supply using a three core cable. The wires are made of copper (which is a good conductor) and surrounded by different coloured plastic (which is a good insulator).

The plug



Functions of the plug

- ⚠ The live wire (brown) carries AC current (230V) from the supply (power station). The neutral wire (blue) completes the circuit.
- ⚠ The earth wire (green and yellow) is a safety feature to prevent the appliance becoming live and electrocuting the user. A two core cable does not have an earth wire.
- ⚠ The fuse is placed before the live wire. It prevents damage to the appliance if there is an electrical surge