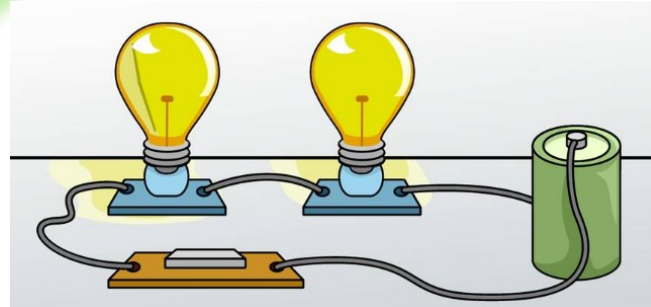


Core Knowledge—Circuits



- Many household devices and appliances run on electricity. Some plug into the mains while others run on batteries.



- An electrical circuit consists of a cell or battery connected in a complete loop to a component using wires.
- If there is a break in the circuit, or a loose connection, the component (e.g. bulb/lamp or buzzer) will not work.
- A switch can be added to the circuit to turn the component on and off.

Scientific Enquiry

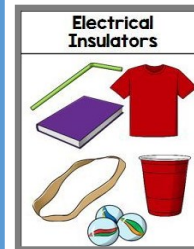
Key Vocabulary

Vocabulary	Definition
cell/battery	A cell is a single unit used for converting chemical or solar energy into electricity. A battery is a container of one or more cells.
component	The parts something is made of.
electricity	A form of energy that can be carried by wires and is used to provide power for devices.

Core Knowledge Conductors and insulators



An electrical conductor is a **material that allows electricity to pass through it easily**. Most metals, including iron, copper and steel, are great electrical conductors. Water (if not pure) also conducts electricity.



An insulator is a **material which does NOT easily allow electricity to pass through it**. Plastic, wood, rubber and glass are examples of good insulators.