



battery (cell) is portable and a stored form of energy



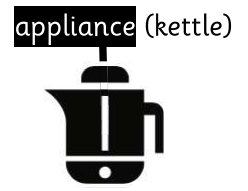
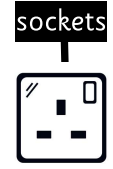
positive (+)
(end of battery)

negative (-)
(end of battery)

electricity is a form of energy that can be powered from a **battery** or the **mains**

mains electricity supplied to a building by wires

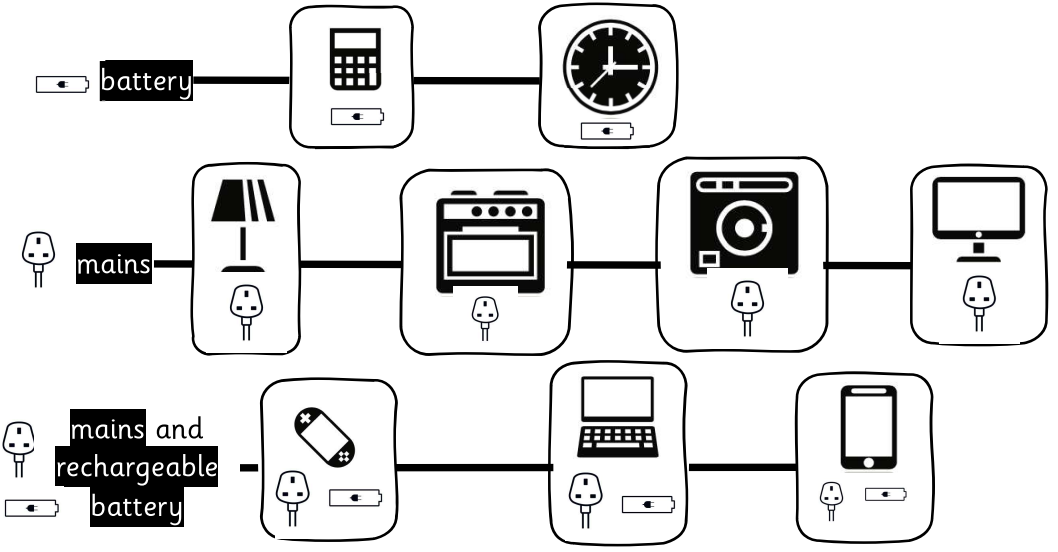
sockets and plugs connect **appliances** and devices to the electrical power source



appliances and devices require different electrical power:

- o battery
- o mains
- o both battery and mains

National Grid manages electricity and gas distribution for England, Scotland and Wales



voltage

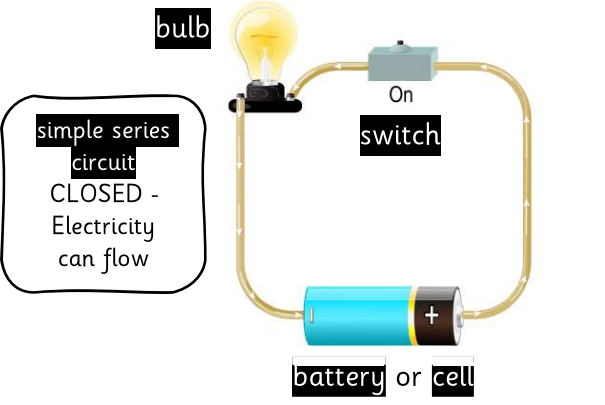
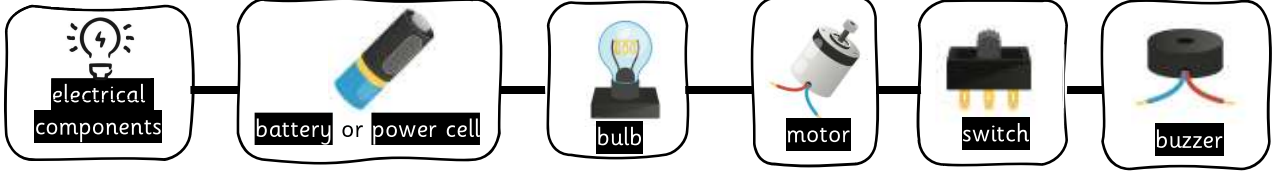
- the 'push' that causes electricity to flow

current

- the 'flow' of electricity through the circuit

simple series circuit

- electrical current follows one path



conductors – materials that **allow** electricity to flow

aluminium, copper, graphite, steel, tap water

insulators – materials that **do not** allow electricity to flow

air, glass, wood, rubber, paper, plastic

⚡

- It is dangerous to play with plugs
- Never put liquids near electrical items
- Never touch exposed wires

⚡

- Never touch switches with wet hands
- Don't fly kites near overhead power lines