

Year 4 Physics Knowledge Organiser: Electrical Circuits

Prior Knowledge

Year 1: Common electrical appliances and simple circuits

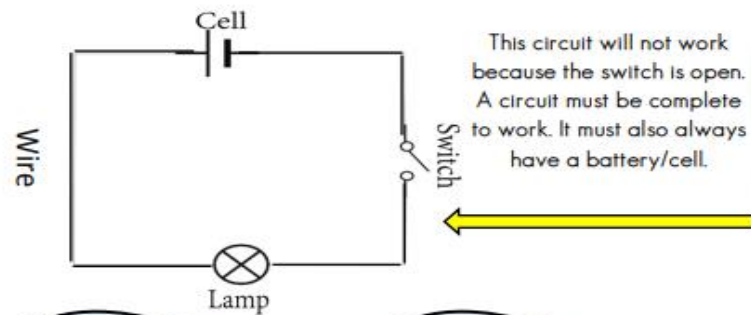
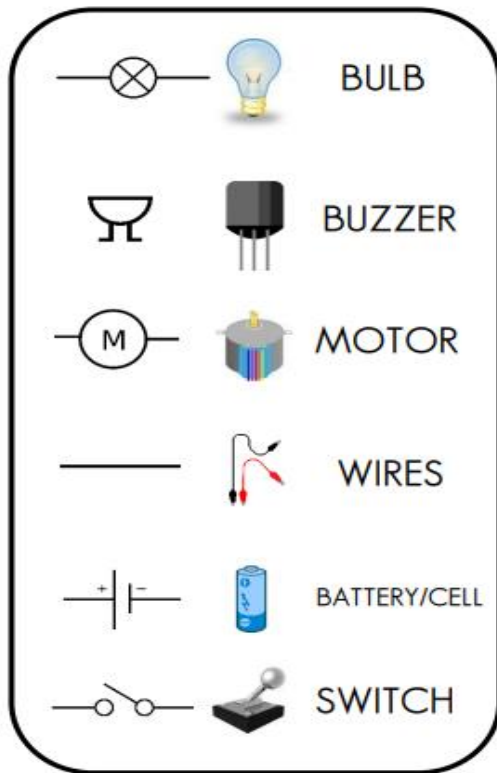
Year 2: Common electrical appliances and simple circuits

Year 3: Investigating different circuits; making a switch

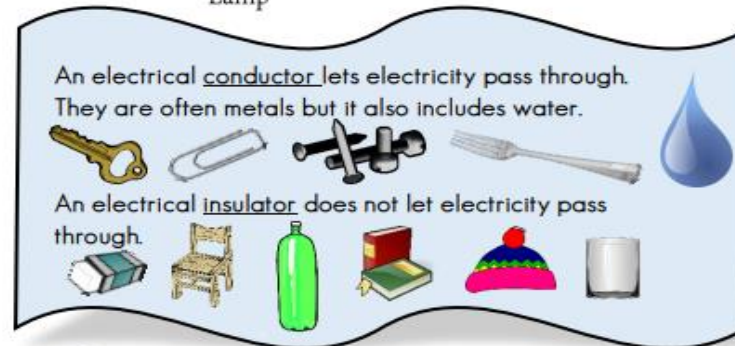
Subsequent Knowledge

Year 5: Conductance and electrical insulation

Year 6: Series and Parallel circuits



This circuit will not work because the switch is open. A circuit must be complete to work. It must also always have a battery/cell.



COMMON APPLIANCES



DANGER! HIGH VOLTAGE!

Electricity is everywhere so always be safe. Be careful of mains switches, open sockets and any signs to do with electricity. The human body is 80% water so it conducts electricity. If someone has had a shock always turn the electricity off first, then call for help!

- 1.) If you make the wires longer, the bulb will get dimmer. This is because there is more resistance.
- 2.) If you add more bulbs, the bulbs get dimmer. This is because there is also more resistance.
- 3.) If you add more batteries, the bulbs will get brighter. This is because there is less resistance and a greater current.

