6G CHANGING CIRCUITS

Glossary

appliance – a household device that uses electricity - can be either mains or battery powered

battery – the power source in a circuit made up of two or more

break – an interruption in the flow of electricity

bulb – an electrical component which lights up in a circuit

buzzer – an electrical component that changes electrical energy into sound

circuit - a circuit is formed when electricity flows through the electrical components

circuit diagram – a diagram that uses conventional symbols to represent the components of an electrical circuit

current - a flow of electricity around a circuit

electrical conductor - a material that allows electricity to flow through it e.g. metals

electrical insulator – a material which does not allow electricity to flow through it e.g. wood



What happens if I use a different size battery?

The pins on this

a **metal** that

conducts

electricity while the outer

casing is made of **plastic**

which is an **electrical**

insulator.

plug are made of

Does if make a difference if I use thicker wire in the leads?



Switches cause breaks in circuits, interrupting the



flow of electricity. In this **tilt** switch a blob of mercury completes

the circuit when the switch is turned by 90°



How do I make all the **bulbs** glow brightly?

A **resistor** makes it difficult for

Mains electricity is delivered to

homes and businesses via a

network of **sub-stations**,

electricity

to flow in

a circuit.

break a circuit in an emergency leads - the wires used to join electrical components

fuse – an electrical component

which will burn out in order to

mains electricity – electricity supplied for use in homes and businesses

motor – an electrical component which rotates causing something to turn

resistor - an electrical conductor that makes it difficult for electricity to flow in a circuit

switch – a device that causes a break in the flow of electricity

terminal – the end of a cell or battery - each cell has a positive (+) and a negative (-) terminal

terminals – the parts of the battery that need to be connected in the circuit

tilt switch - a switch that uses gravity to break the circuit

two way switch – a switch that is connected to two circuits that allows one or the other to function

Here are some of the **symbols** used when drawing circuit diagrams.

What would this circuit look like?



cables and pylons called the **National** Grid.

