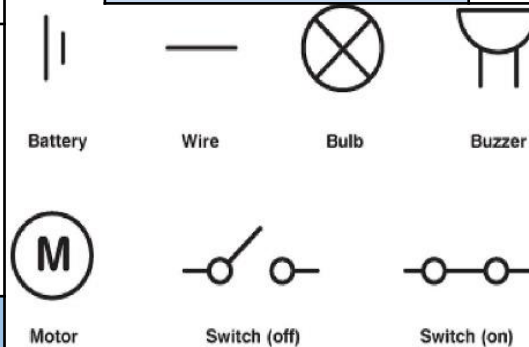


What (key knowledge)	
Electricity	
What is Electricity?	<ul style="list-style-type: none"> Electricity is created by generators which can be powered by gas, coal, oil, wind or solar. The electrical energy can be converted into other types of energy such as light, heat, movement or sound. Electricity is dangerous, so be careful when using electrical appliances.
What are common appliances that run on electricity? (main / battery)	
Any appliances that need to be plugged in run on electricity.	
Mains Most of the large appliances in our home are powered by mains electricity. ⇒ Television ⇒ Computer ⇒ Microwave ⇒ Lights	Battery powered electricity. Batteries are a great way to provide electricity when mains power is not available, like when you are camping or there is a blackout. ⇒ Torch ⇒ Clocks ⇒ Remote controls.
Electrical circuits	
Things you need to know about circuits	<ul style="list-style-type: none"> Electricity can flow through the components in a complete electrical circuit. A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends. (A battery is made from a collection of cells connected together). A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through. Electricity will only travel around a circuit that is complete. That means it has no gaps.

What? (Key vocabulary)	
Circuit	A path through which an electrical current flows.
Component	A part of something (a part of a circuit).
Conductors	Some materials let electricity pass through them easily. They are known as electrical conductors. Many metals, such as iron, copper and steel, are good electrical conductors.
Connected	Something that is joined or linked.
Current	The flow of electrical charge.
Generator	A machine that make electrical energy.
Insulators	Some materials do not allow electricity to pass through them. They are known as electrical insulators (Wood, glass, plastic and rubber are good electrical insulators).



Would the bulb light up?

Battery
Buzzer Bulb
Switch

Will the bulb light?

Yes

Why?

The circuit has a battery and a bulb and is complete.

Buzzer Bulb
Switch

Will the bulb light?

No

Why?

The circuit has no battery to provide the electrical power.