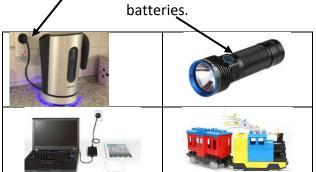
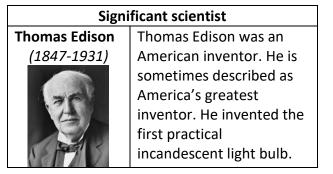
Key Vocabulary	
electricity	A form of energy used for lighting,
	heating, making sound and making
	machines work.
electrical	A machine or device that runs on
appliance	electricity.
mains	The electricity supplied to
	households from power stations.
electrical	This consists of a cell or battery
circuit	connected to a component using
	wires. It needs to be a complete
	circuit to work.
cell and	A cell is a single unit and a battery
battery	is a collection of cells.
electrical	A part that combines with others
component	to form a circuit. E.g. bulb, motor,
	buzzer
switch	Can be added to a circuit to turn a
	component on or off. It allows the
	electricity to flow or it stops it.
conductor	Material that allows electricity to
	pass through.
insulator	Material that does not allow
	electricity to pass through it.

# Appliances that run on electricity

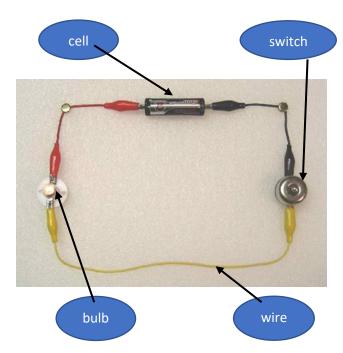
Some plug into the mains and others run on hatteries.



# **Electricity – Year 4**

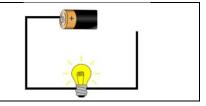


### Electrical circuit with a bulb

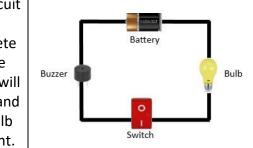


The switch opens and closes the circuit. The bulb lights in this circuit because the switch is on.

This circuit
will not
work as it
is not
complete.



This circuit is complete so the buzzer will sound and the bulb will light.



#### **Conductors and insulators**

## **Conductors**

Some materials let electricity pass through them easily. These are known as electrical conductors. Many metals are good electrical conductors, such as iron, copper and steel.





# Insulators

Some materials do not allow electricity to pass through them. They are known as insulators. Plastic, wood, rubber and glass are good electrical insulators.





© ECM Education Consultants 2019

Information relating to 'famous scientists' adapted from work by Alex Sinclair & Amy Strachan of St Mary's University

