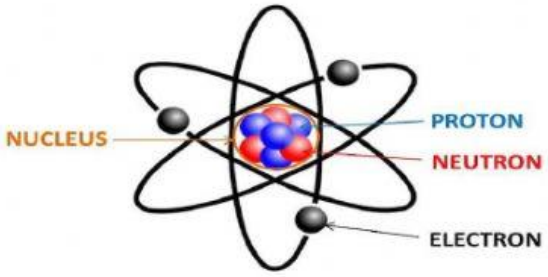
Electricity

Everything in the world is made up of tiny parts called **atoms.**

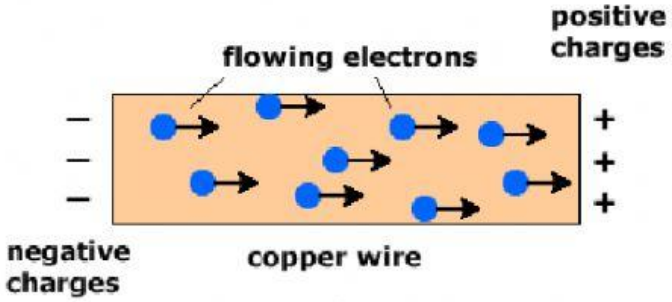


Atoms themselves are made of small particles. These particles are:
-Protons, which are positively charged particles.
-Neutrons, which are neutral particles with no charge
-Electrons, which are negatively charged particles.



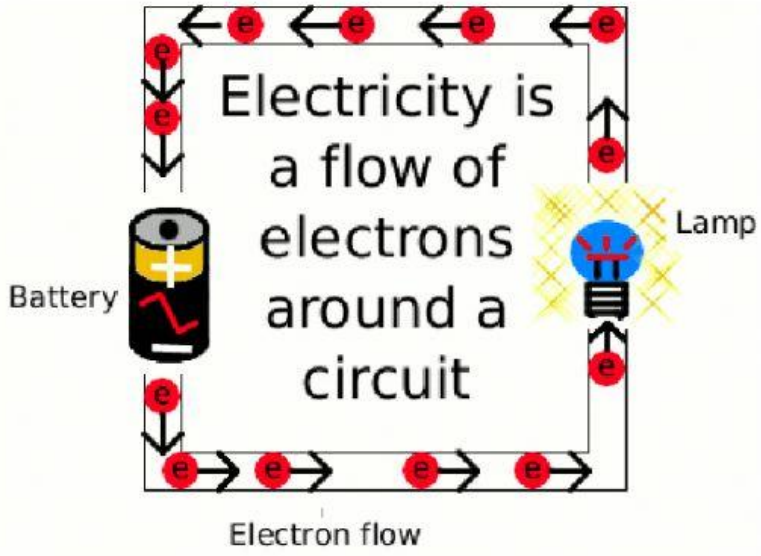
Protons and neutrons are in the centre of the atom, while electrons orbit (move around) the centre.

Electrons' ability to move makes them very special as they give out **electricity** as they move.

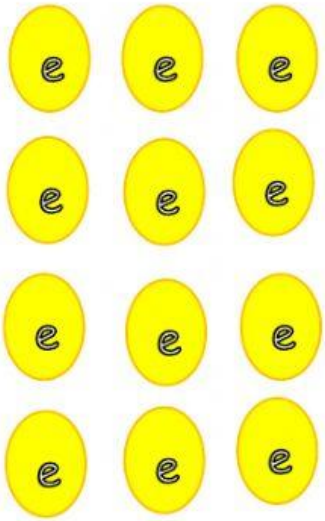


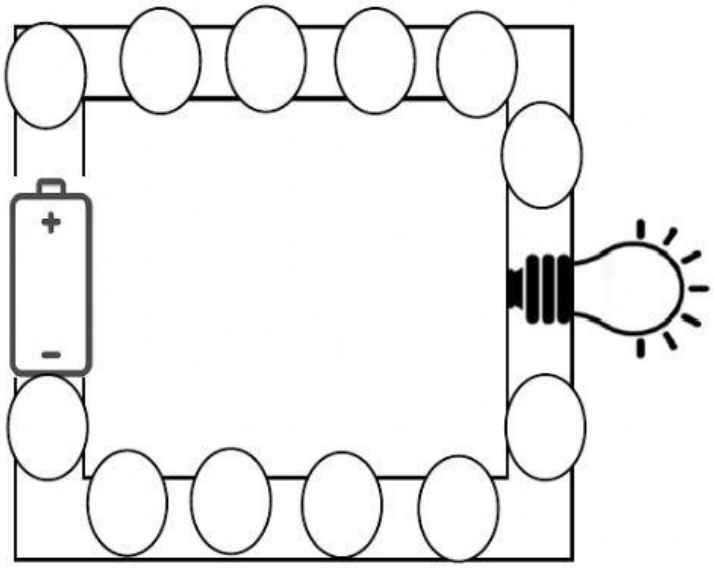
LIVEWORKSHEETS

An **electric current** is the flow (movement) of electrons. They need to move in a complete path, from a negative charge to a positive charge.

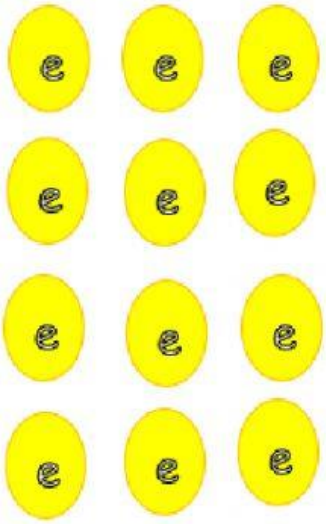


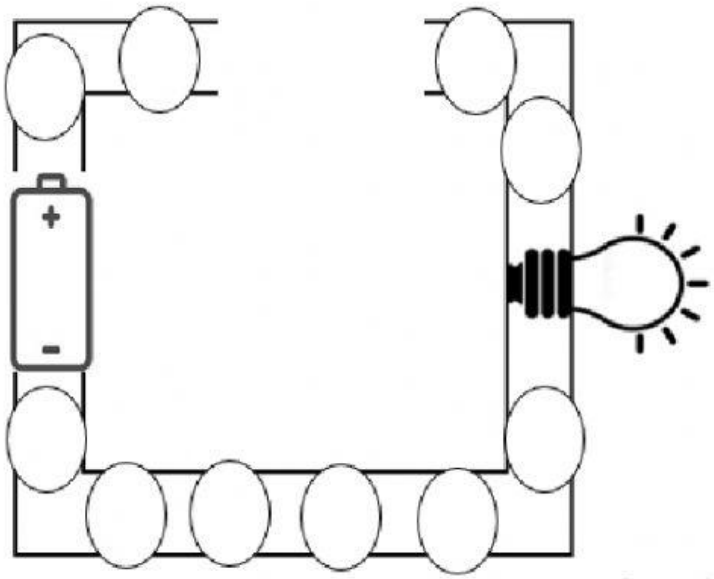
Activity 1: Drag and drop the electrons below to show how they'd move in each circuit. You can choose to put the electrons in the empty circles or leave them empty.





LIVEWORKSHEETS





-Electricity is a form of energy called **ELECTRICAL ENERGY**
-Electrical energy can be changed into other types of energy like:
Heat energy, light energy, movement energy (kinetic energy)
(Examples - microwave, light, washing machine)

Activity 2: *Look at the following pictures and mention the change of energy. The first one was done for you.*



Light bulb

1-From electrical energy to light energy.



Microwave

2-From ..... energy to ..... energy.

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3-From ..... energy to ..... energy.

Fan

Circuits

A circuit is the path electricity takes when it flows.

A circuit is composed of two basic components:

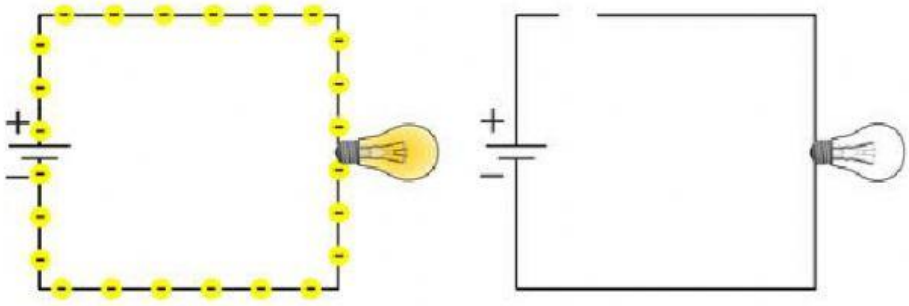
Cell & Wires.

The cell- is the source of energy for the circuit.

The wires- make the path for the electric current.

Components in the circle must all be connected to each other to make a **COMPLETE** and **CLOSED** circuit.

Activity 3: *Which of the circuits will work? Show your choice by clicking on it.*

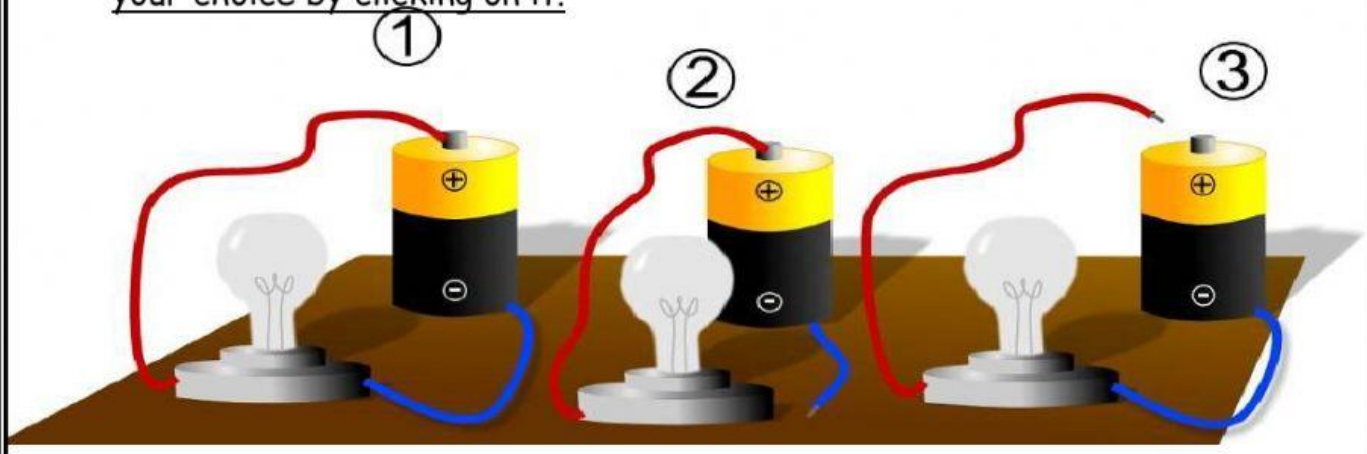


closed circuit

open circuit

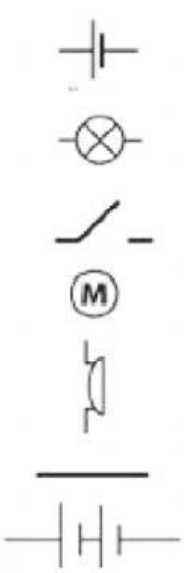
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Activity 4: Look at the images below. Which one will be working? Show your choice by clicking on it.



We use symbols to express circuits. This makes it easier for us to study them.

Activity 5: Match the following symbols with their image and name.





Bulb

Cell

Buzzer

Battery

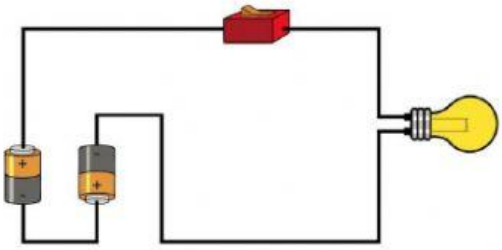
Motor

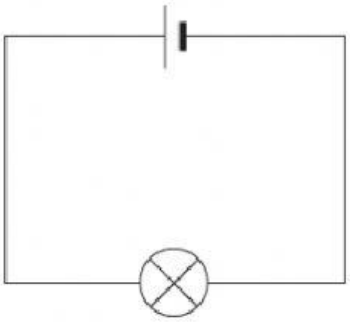
Connecting wire

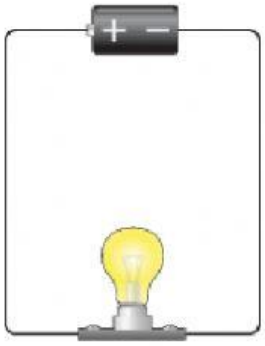
Switch

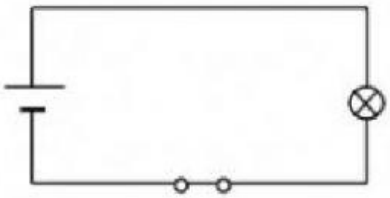
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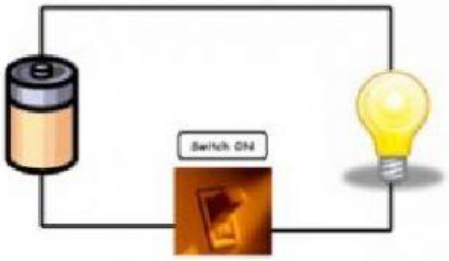
Activity 6: Match the diagrams to their appropriate representation:

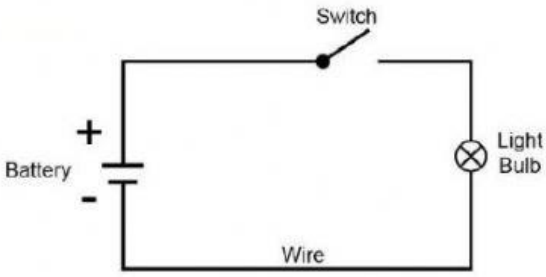












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