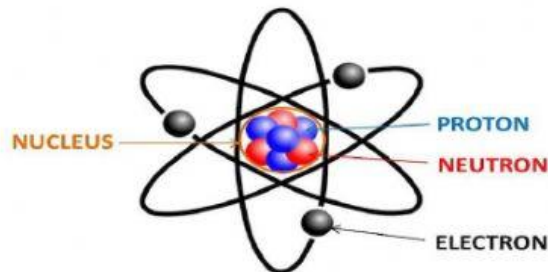


Electricity

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



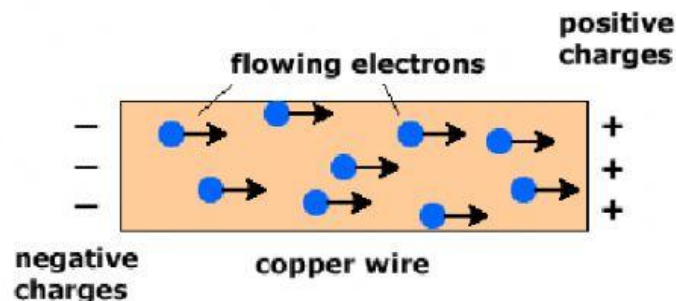
Atoms themselves are made of small particles. These particles are:

- Protons, which are positively charged particles.
- Neutrons, which are neutral particles with no charge
- Electrons, which are negatively charged particles.

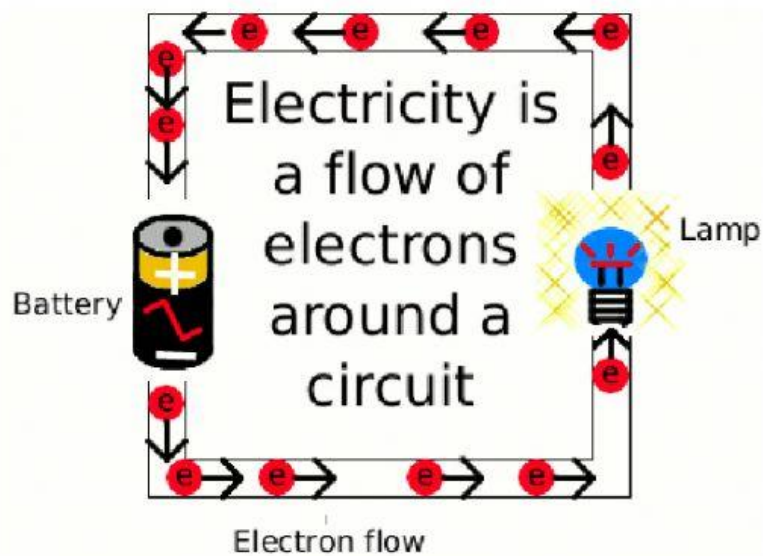


Protons and neutrons are in the centre of the atom, while electrons orbit (move around) the centre.

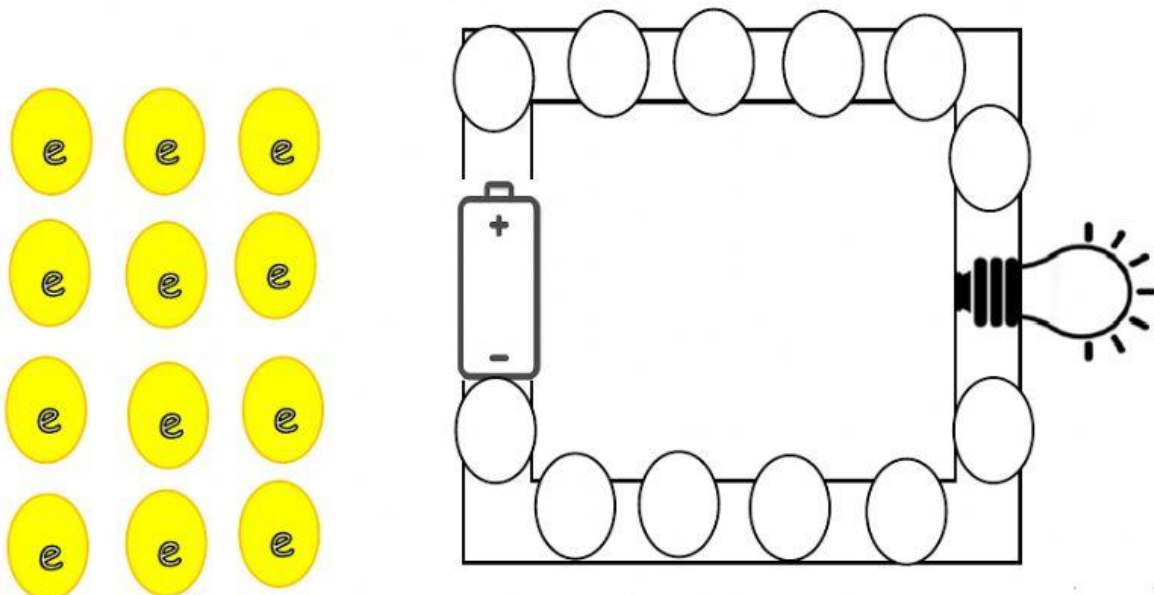
Electrons' ability to move makes them very special as they give out **electricity** as they move.

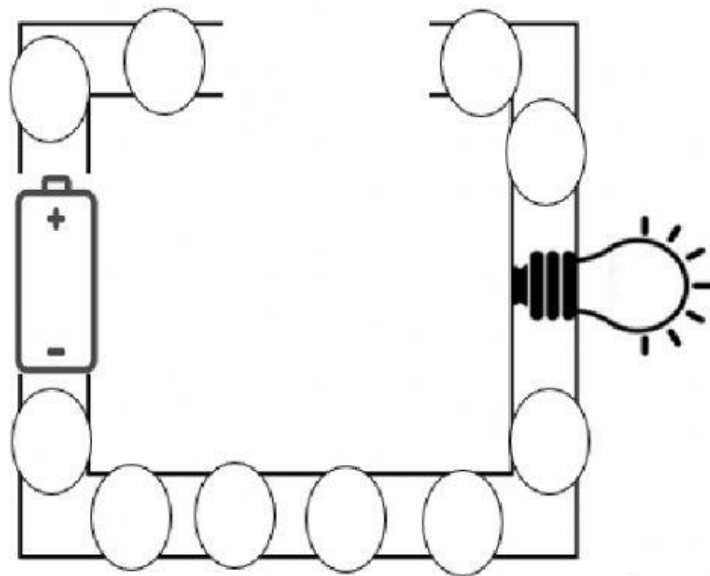
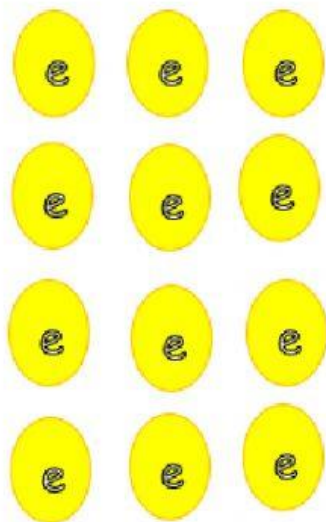


An **electric current** is the flow (movement) of electrons. They need to move in a complete path, from a negative charge to a positive charge.



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.





- 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

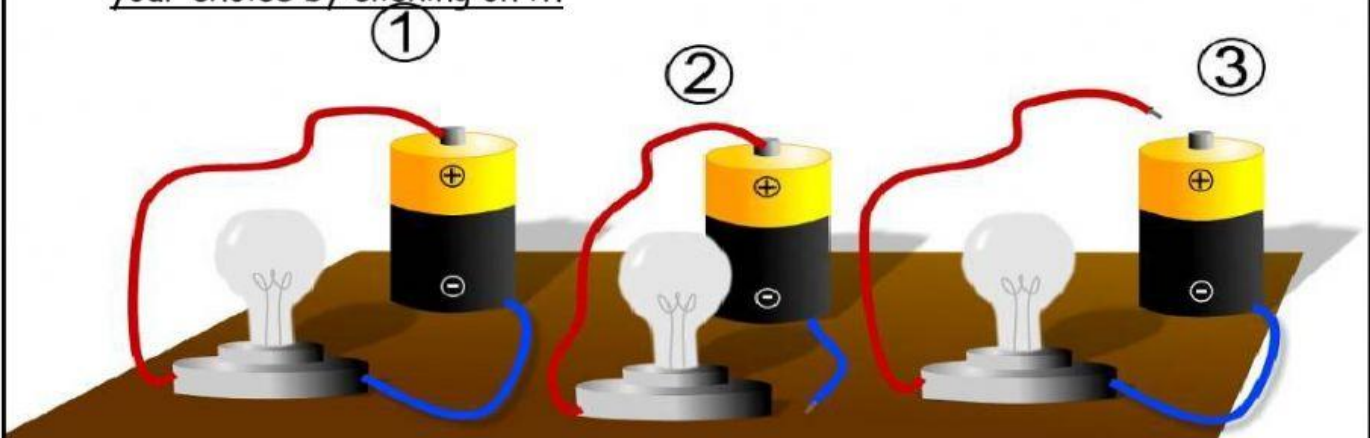
1-From electrical energy to light energy.



Microwave

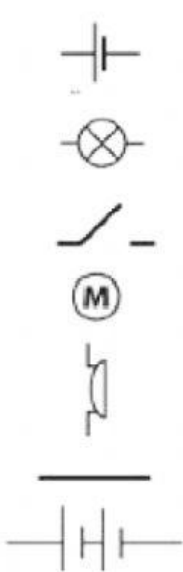
2-From energy to energy.

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

Activity 6: Match the diagrams to their appropriate representation:

