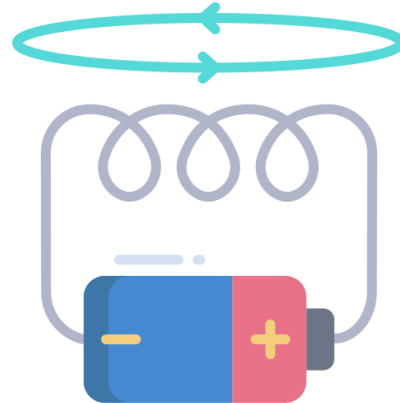


Biology Bricks: Activity

Build Your Own: Electromagnet

What you will need:

- Half metre copper wire
- One dry cell/battery
- Iron nail
- Electrical tape
- Iron filings



Instructions

1. Remove the insulation from both ends of the copper wire and wrap it around the nail.
2. Touch the ends of the poles to the dry cell or battery. Now, try tracing the path of electricity in the device.
3. Place the nail near iron filings and observe them jumping up and down.
4. Your electromagnet is ready if the filings jump up and down. If not, try again.

Why does this Happen?

The nail placed in the wire forms the electromagnet. Electricity is then sent through as a current, which makes the iron filings jump up and down. The more you loop around the nail, the stronger the magnetic field will become. Devices that use electromagnets include rotary telephones, washing machines.