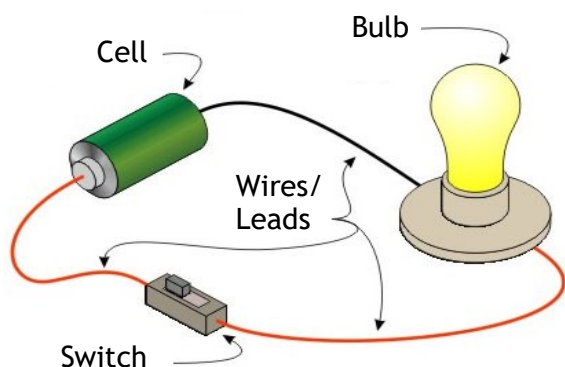


S2 Science—Circuit Symbols

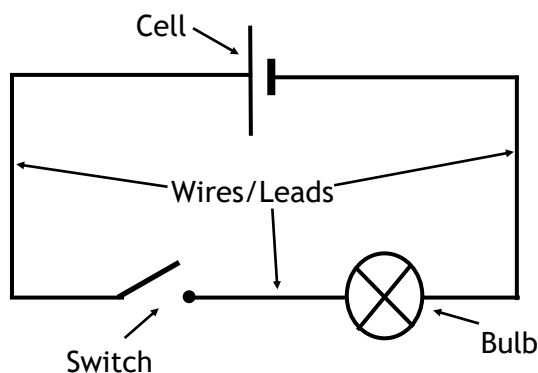
Circuit symbols are symbols that we use to make drawing electrical circuits easier.

This picture shows a basic circuit.



If we were to try and draw a circuit such as this, it would take a lot of time - and also depend on your artistic ability.

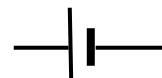
To make it clear what is in each circuit, we use symbols to make it easier and faster to draw a circuit. The above circuit looks like this as a circuit diagram.



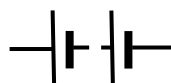
The following are commonly used circuit symbols we use to draw electrical circuits.



Bulb



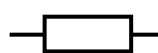
Cell



Battery



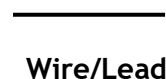
Switch



Resistor



Electric Motor

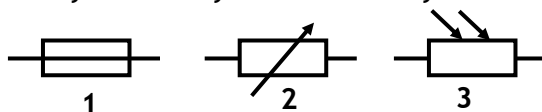


Wire/Lead

These are only a few of the most common circuit symbols - there are many more!

Bonus Challenge!

Can you identify these circuit symbols?



Task

- 1) Research (using the internet) the circuit symbols for the following electrical components:
 - a) A speaker
 - b) A microphone
 - c) A bell
 - d) A LED

- 2) Draw the following circuits out either on paper or by using an online package (link below):
 - a) A bulb connected to a battery with two wires.
 - b) A cell connected to an electric motor and switch, with three wires.
 - c) A battery, two bulbs, and a resistor connected by five wires.

Online circuit builder (Note, not all circuit symbols will be the same):

https://phet.colorado.edu/sims/html/circuit-construction-kit-dc/latest/circuit-construction-kit-dc_en.html