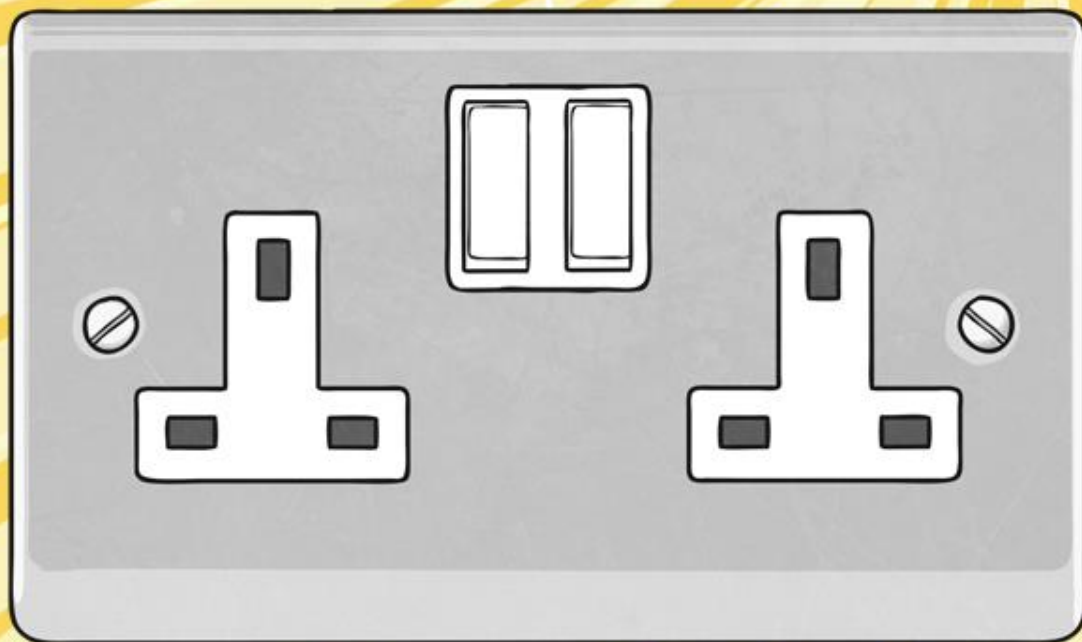


Switches



Circuits



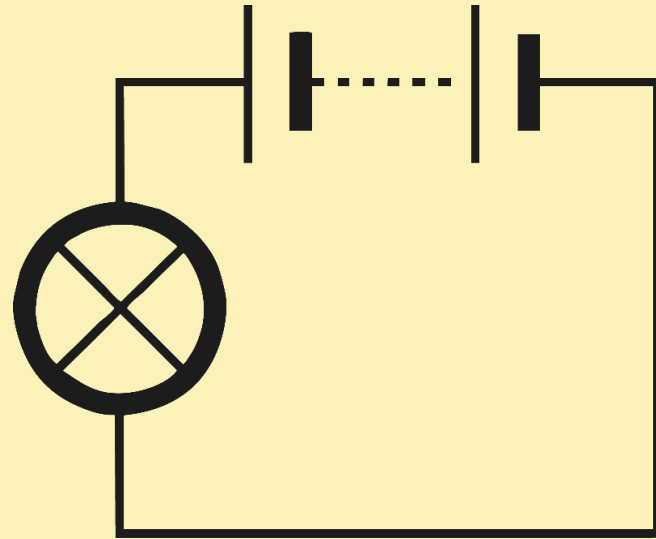
Electrical currents need a path on which to travel.

Another name for this path is a circuit.

Electricity flows from the power source, in a loop or a circuit, back to the power source.

This means that the electricity must start and finish at the same power source.

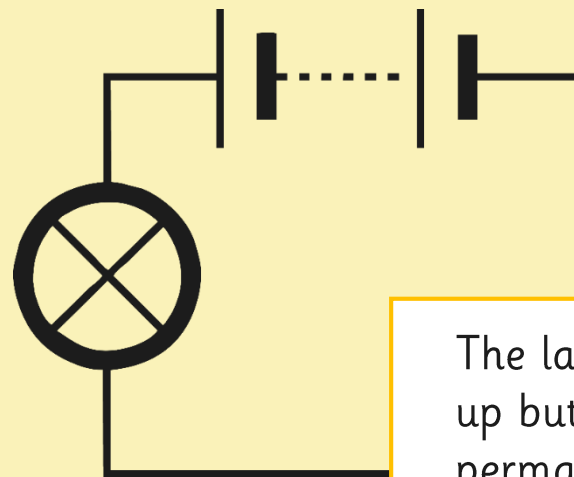
If the circuit is not complete (if the loop is not closed) then electricity cannot flow through it properly.





Circuits

Would this work as a circuit in a lamp?



The lamp would light up but it would be permanently on.



Circuits

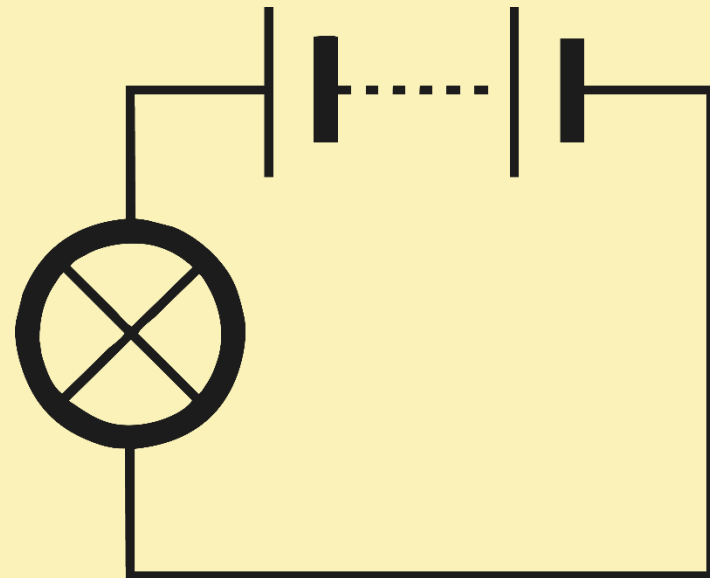
How could we make it easier to turn the light on/off?



closed switch



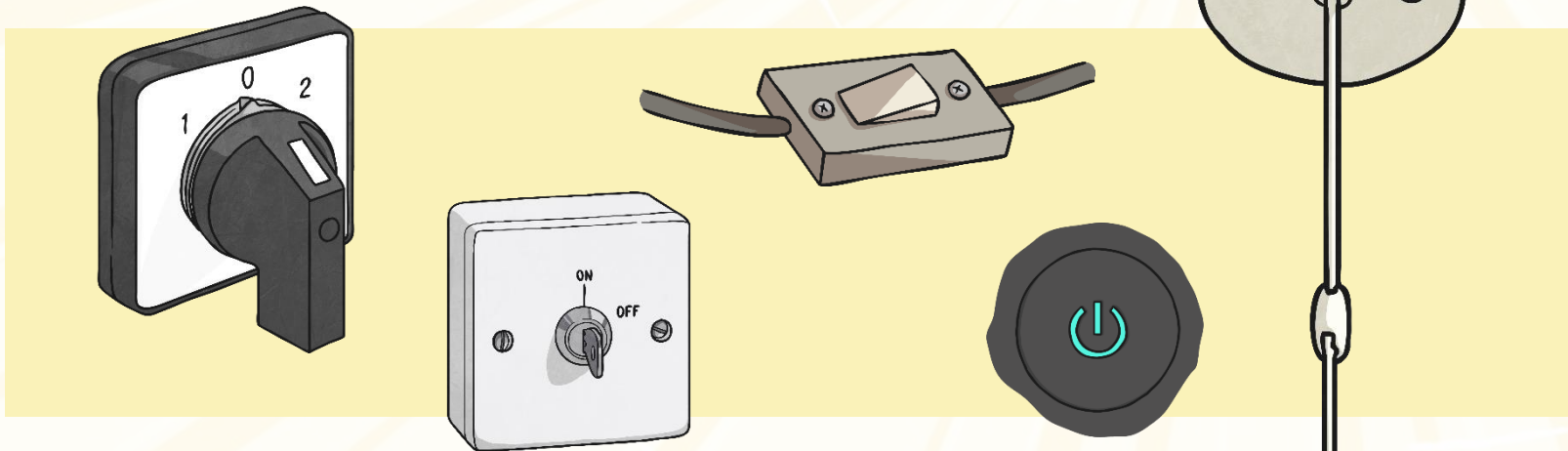
open switch





Making Switches

The outside of switches are often made out of plastic, which is an insulator (does not easily allow electric to pass through it.)

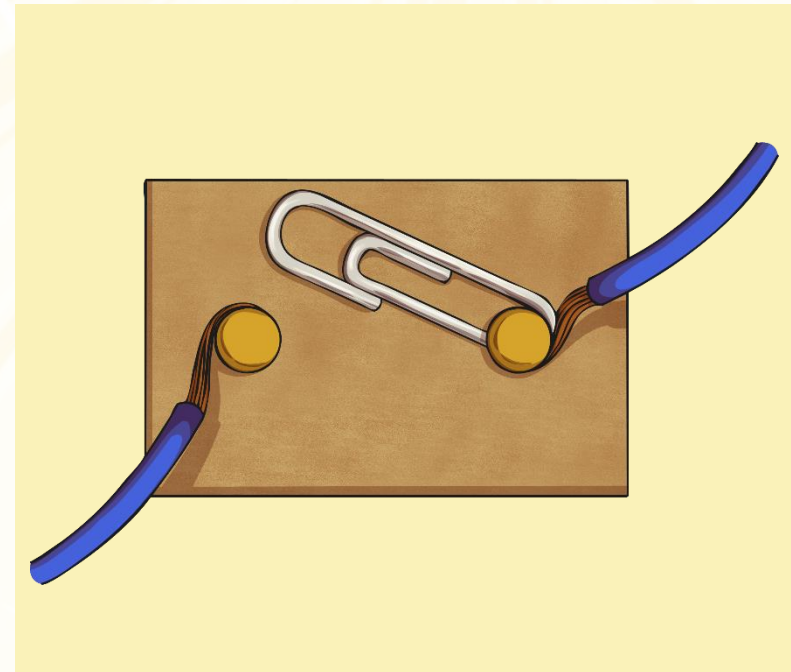
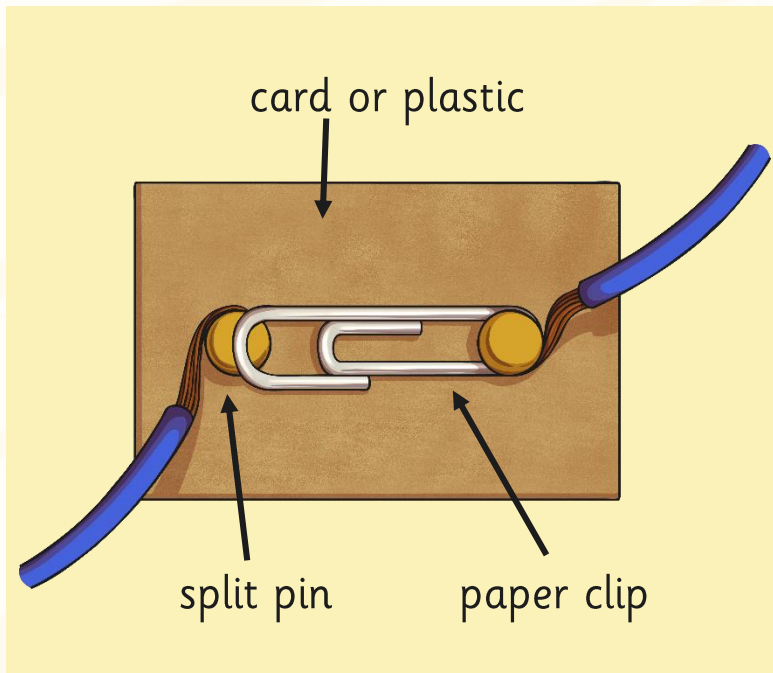


The material used to create the inside of the switch should be a conductor (a material which allows electric to pass through it).



Making Switches

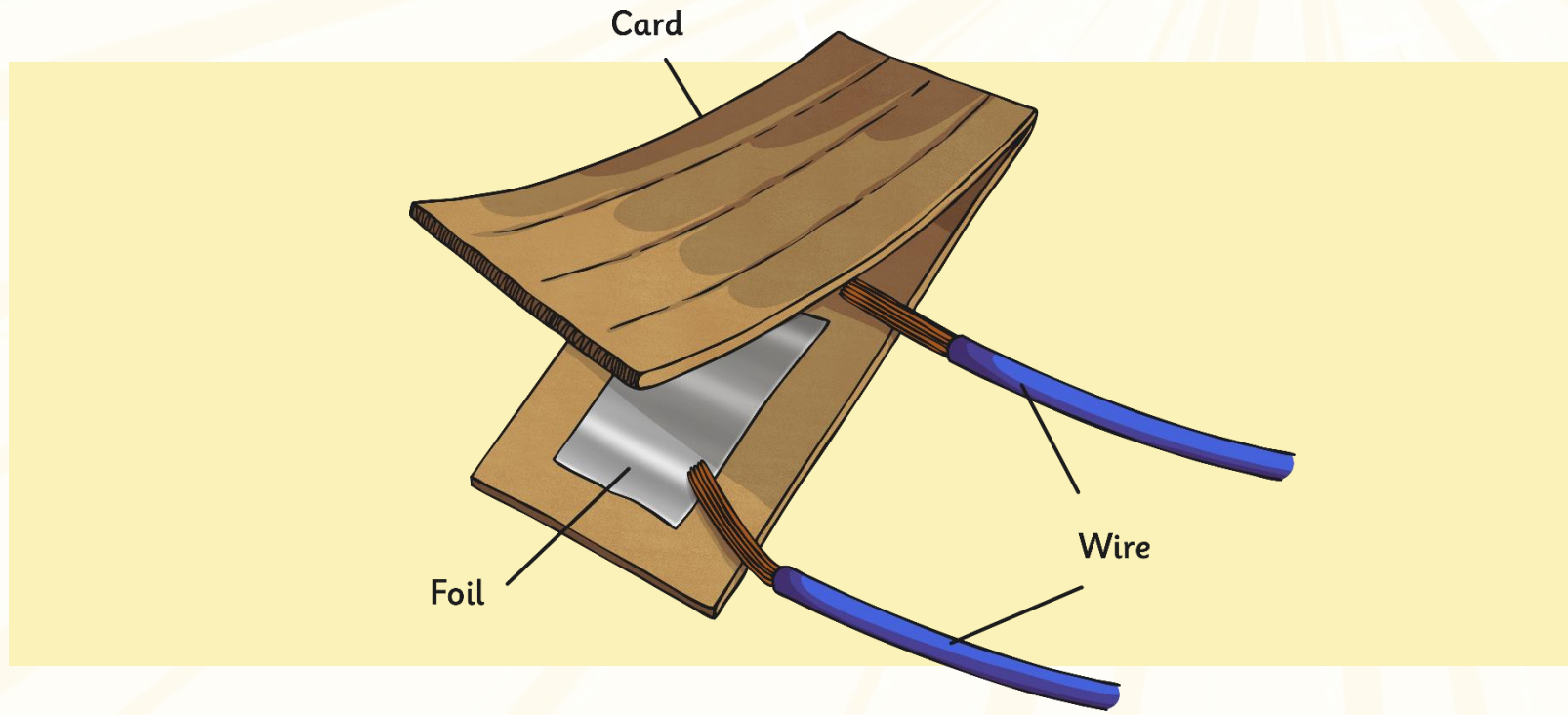
It is easy to make your own switch.





Making Switches

Here is another example of a home-made switch.





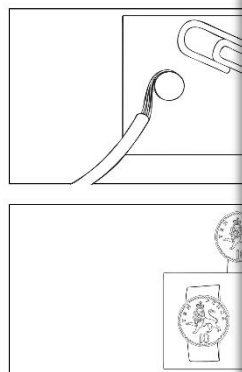
Making Switches



Design and make your own home-made switch.
Draw a labelled diagram of it below.



Make the different switches.
Use them as part of a circuit to turn a bulb on and off.



Making Switches

Make the different switches.
Use them as part of a circuit to turn a bulb on and off.

