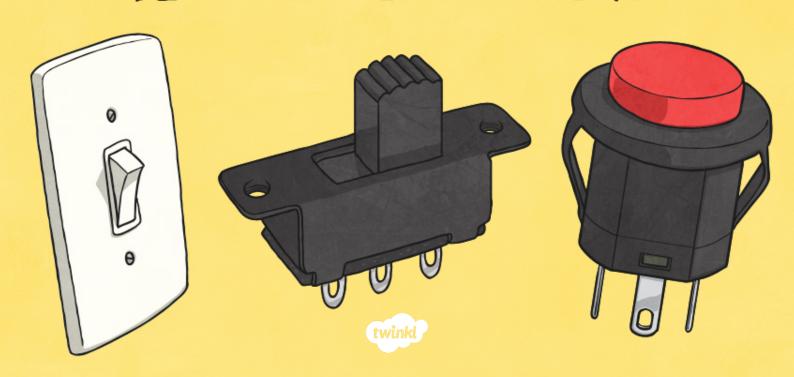
# Splendid Switches



## Thursday 4<sup>th</sup> February 2021 T: Can I investigate the different types of switches?

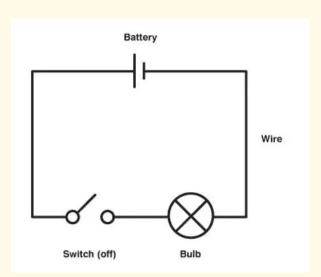


## Let's remind ourselves of what an electrical circuit is:

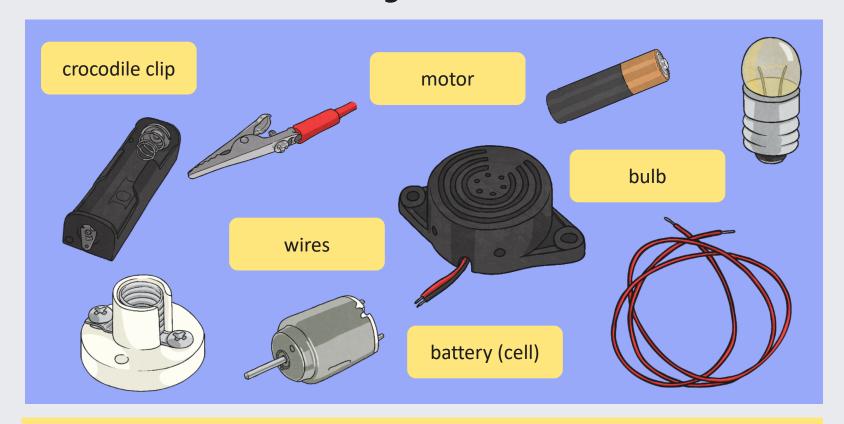
Click on the link below to watch the video clip:

https://www.bbc.co.uk/bitesize/clips/zq3fb9q





### Parts of a Circuit



Look at the objects. Which ones do you recognise? Which ones are new to you?

### **Switches**

• What switches can you recognise from home?





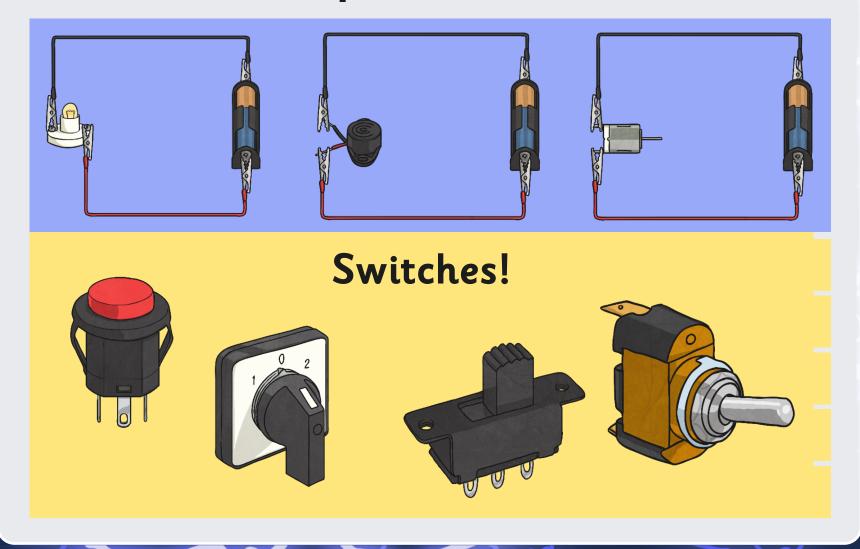








## Complete Circuits



#### **Switches**

There are a wide variety of switches that can be used.

Match the type of switch and its name.

















slide switch paddle switch

push button switch

selector switch

pull switch

key switch

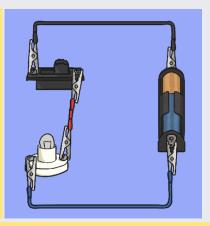
dimmer switch

toggle switch

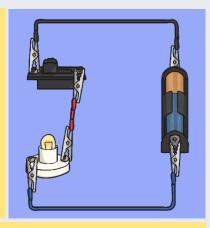
#### How Switches Work

A switch

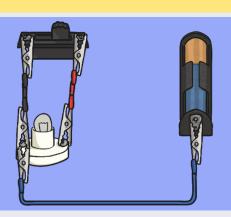
'breaks' a complete circuit on purpose to stop the flow of electrons when it is off.

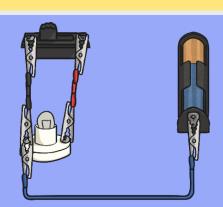


When the **switch** is **on**, the circuit is complete and so the **electrons** are able to flow around the circuit.



A circuit with a switch is not the same as an incomplete circuit. In an incomplete circuit, the electrons are unable to flow at all whether the switch is on or off.





#### Today's Task: Investigating switches

#### **Activity**

You will be looking around your household to see if you can spot different types of switches. Once you have spotted a switch, write down what the switch is used for and remember to record the amount of switches as a <u>tally</u> (draw a vertical line for each switch found).

Do not press any switches without permission by an adult!

Take a look on the next slide for help to see where you may find some of these switches.

#### **Investigating Switches** See how many of the following types of switches you can find and note down its use (i.e. switch for a light). Then tally the number of times you found it and write down the total. Type of Switch Paddle switch Key switch Push button switch Toggle switch Selector switch Dimmer switch (9) Pull switch



The paddle switch is commonly found in many rooms to turn the ceiling light on and this is usually located on the wall.



You might find a pull switch in the bathroom to turn the light on.



You may find a selector switch on your oven.



You can find a push button switch on a tv or a laptop to turn it on.

See how many switches you can find at home. You may not have all of these switches in your household. If so, you can record the total as 0.