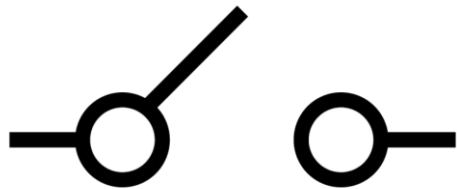


Switches



What is a switch?

A **switch** can disconnect or connect the path in an electrical circuit or change the path the electricity takes in a circuit.



Types of Switches



Timer Switch



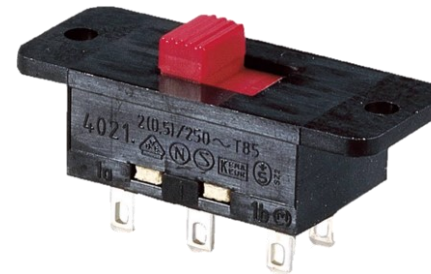
Mercury Switch



Toggle Switch



Push Button Switch



Slide Switch



Pull Switch



Toggle Switch

Who Invented Switches?



Holmes' light switch,
the Discovery Museum

In 1884 John Henry Holmes invented the *quick break light switch*. His invention is still used today in various electrical light switches!



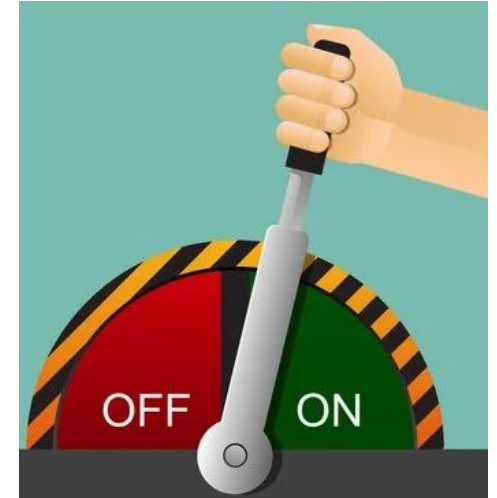
John Henry Holmes
1857-1935

How Switches Work

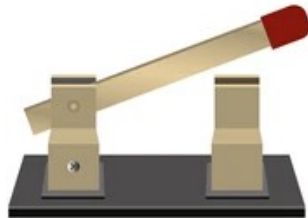


An **OPEN** switch means the flow of electricity is interrupted and the power is **OFF**.

A **CLOSED** switch means the flow of electricity is allowed and the power is **ON**.



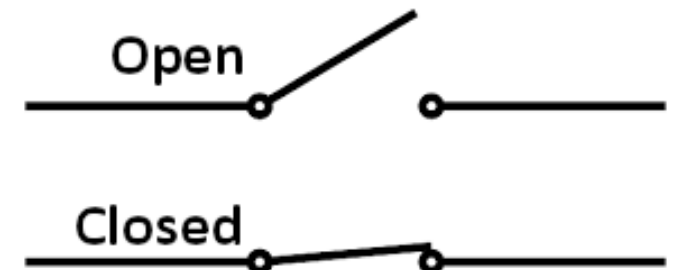
Open



Closed

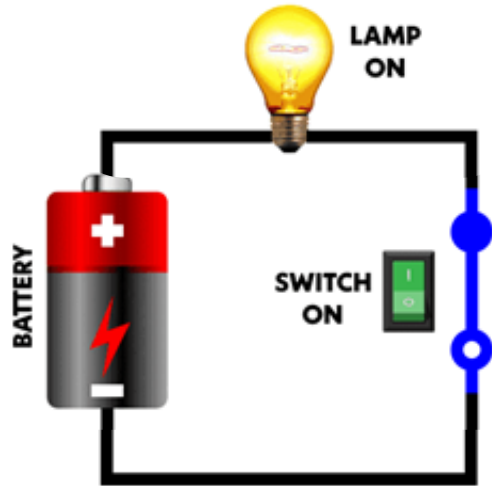


Push to Open
Push again to Close

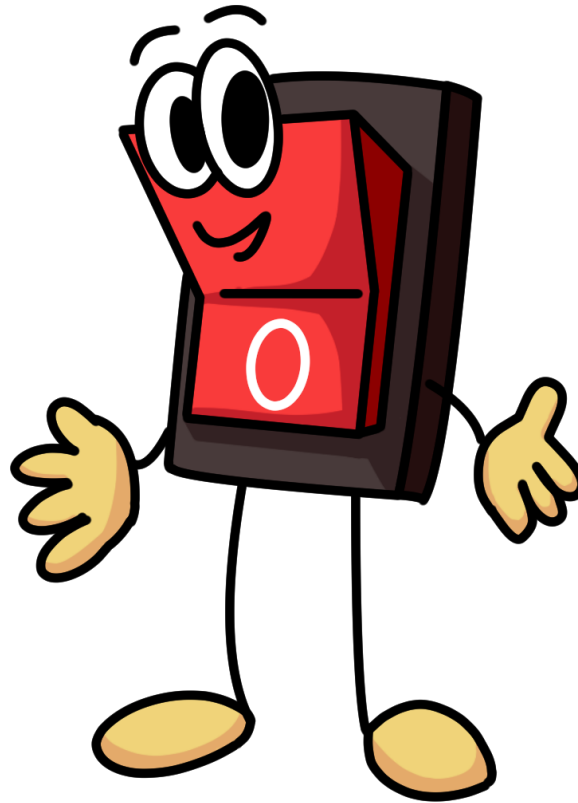


How Switches Work in a Circuit

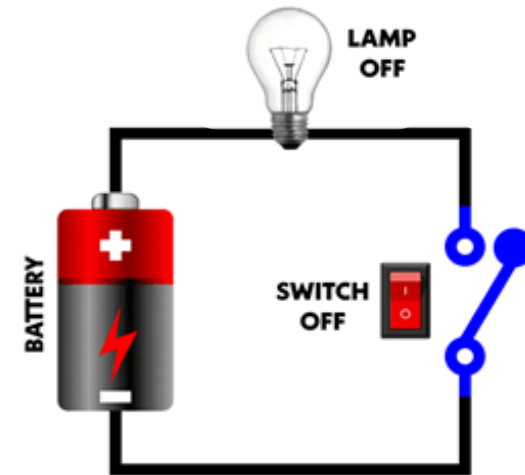
A **CLOSED** circuit the flow of electricity is *allowed* so the power is on and the lamp is on.



Closed Circuit



An **OPEN** circuit means the flow of electricity is *interrupted* so the power is **OFF** and the lamp is off.



Open Circuit

