All About Circuits

In this two page worksheet, you will learn about circuits, including what they look like, how they work, how to draw a diagram of them, and how to make one.

Circuits are all around us; they can be as simple as a battery connected to a lightbulb, and as complex as those found within computers. Circuits are like highways for electrons, which are particles that make up electricity. Electrons will always travel between positive and negative terminals of a power source, like a battery. Like people, electrons will never leave "home" unless they can get back; therefore, electrons will only flow through a circuit that has a complete path between positive and negative terminals. If the electrons dont flow, then power won't flow, and anything connected to the circuit will not turn on. In addition, electrons are lazy! they will always take the path of least resistance, or the easiest route between terminals. For example, if given the choice between a path with a lightbulb or a path without, they will take the path without the lightbulb.

Symbols used to represent circuit parts:

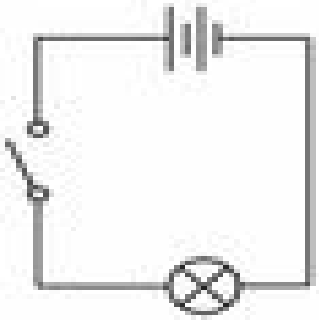
BATTERY: 

WIRE:

LIGHTBULB: 

SWITCH: 

Circuit Diagram:



Drawing of Circuit: