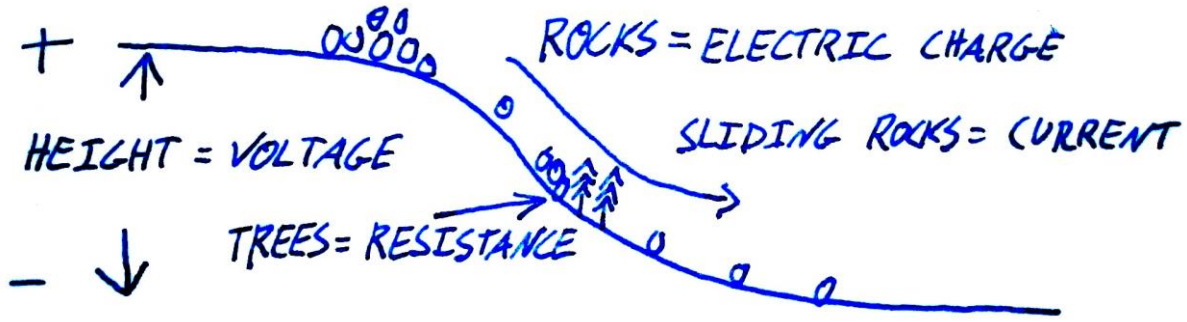
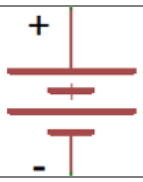
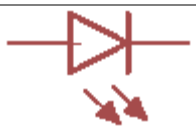
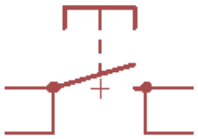
Activity 1 – Lighting Up an LED

Electricity

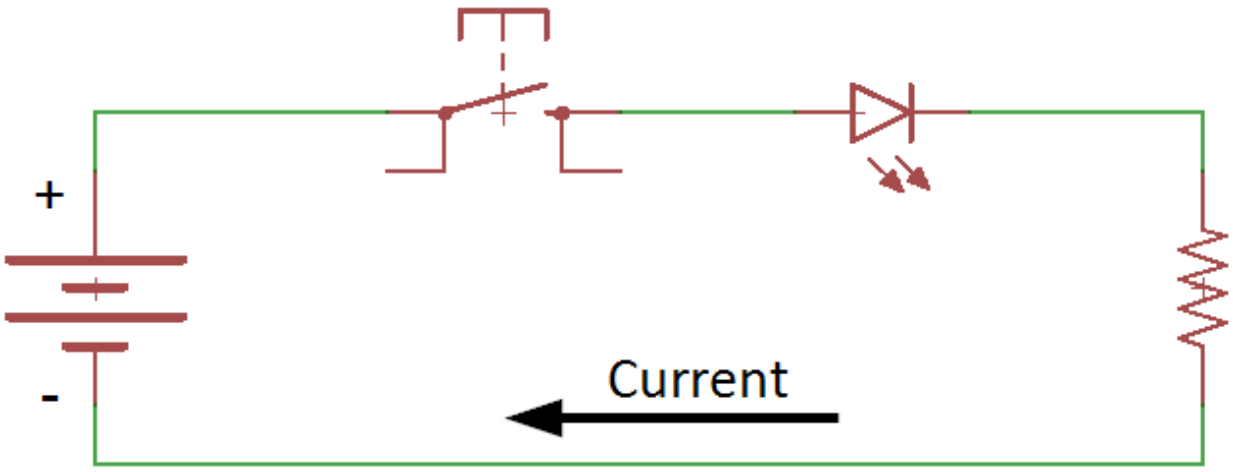
We can think of electricity like a rock slide:



Circuit Diagrams

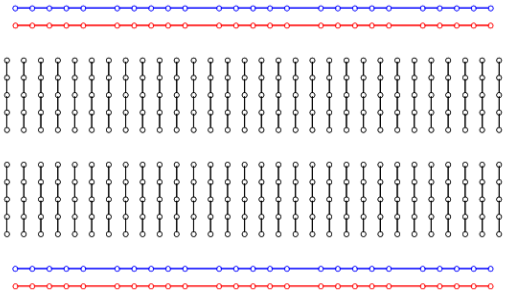
	*Battery*	The voltage source for the circuit.
	Wire	A pathway for the current to move along.
	*Diode*	Current will only flow in one direction, along the "arrow" shape.
	*Resistor*	Limits the flow of current through the circuit.
	*Button*	Like a door for current to flow through. When the button is pressed, the circuit is connected and current will flow.

This is the circuit we will build to light up the LED:



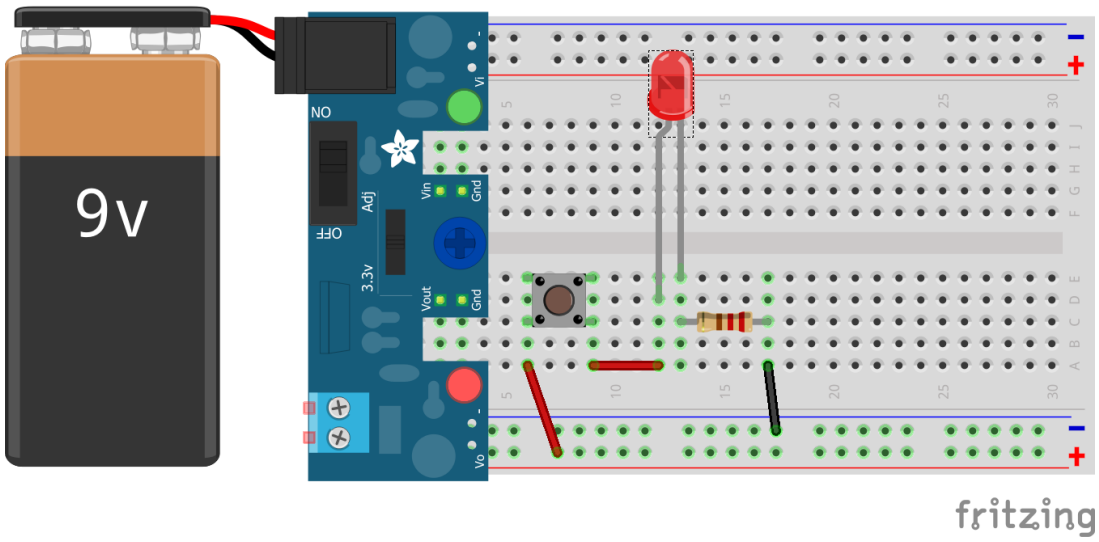
Building an LED Light Circuit on a Breadboard

Breadboards are used to build circuits that can be put together and taken apart without the needing special tools. The RED lines are used for the (+) side of the battery. The BLUE lines are used for the (-) side of the battery.

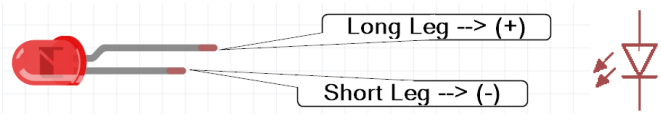


Current flows along the lines. Parts inserted into the same line are electrically connected

Using the circuit diagram, we can assemble the circuit on the breadboard. Be careful, your circuit will NOT look exactly like this! This is just one possibility:



Make sure you have the LED in the right direction:



Notes, Ideas, Questions