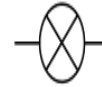
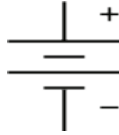


SEMTech (Student Engagment and Mentoring in Technology)

Basic Electricity



The Three Basic Units of Electriciry: Voltage, Resistance & Current

Voltage is Measured in **VOLTS** and is represented with (**V**)

Resistance is Measured in **Ohms** and is represented with (**R**)

Current is Measured in **Amps** and is represented with (**I**)

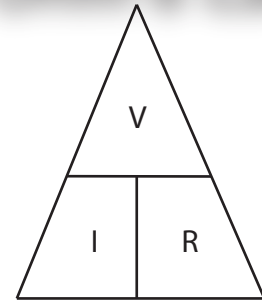
Think of a Water Pipe!

Voltage is the water pressure strength pushing through the pipe

Resistance is the Size of the pipe

Current is the amount of water in motion moving through the pipe

Ohm's Law



V divided by I equals R

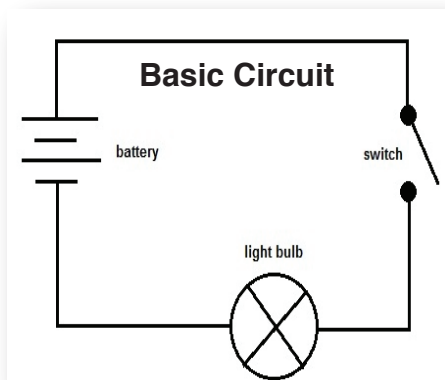
V divided by R equals I

I multiplied by R equals V

Ohm's Law

Ohm's Law

Ohm's Law



Component	Circuit Diagram Symbol
Wire	—————
Resistor	— zigzag —
Light bulb	— circle with X —
Cell	— —
Battery	— —
Switch	— ● — / — ● —

Note: Electricity (direct current) always flows from negative to positive

Note: **Volts Multiplied by Current = Wattage**, which is the power generated by electricity