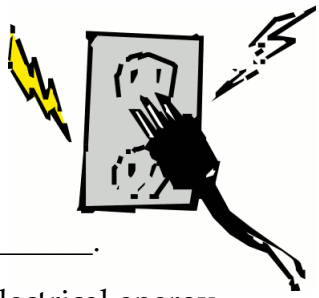
CURRENT ELECTRICITY



- Static electricity forms when charges remain on an object for a while.
- Current electricity forms when _____.
- Current is formed when a device changes other forms of energy into electrical energy.

CURRENT ELECTRICITY:

- Results from the _____of
- The movement has TWO components:

  A. _____ **- measured in Volts (v) –** similar to water pressure

  B. _____ - **measured in Amperes (A)** – similar to water flow

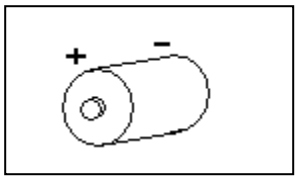
  (how much water past a certain point in one second)

VOLTAGE (V):

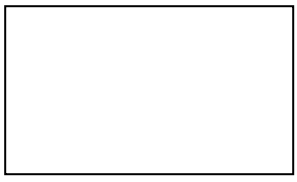
- To make electrons move, they have to be pushed. They are forced along a metal in one direction.
- This push is called voltage or _____ _____
- Measured in _____ by a device called a _____.
- It can be described as a measure of the electrical pressure produced by battery or power supply.

We get electrical energy from a _____ _____.

Two or more chemical cells joined together is a _____.



Cell

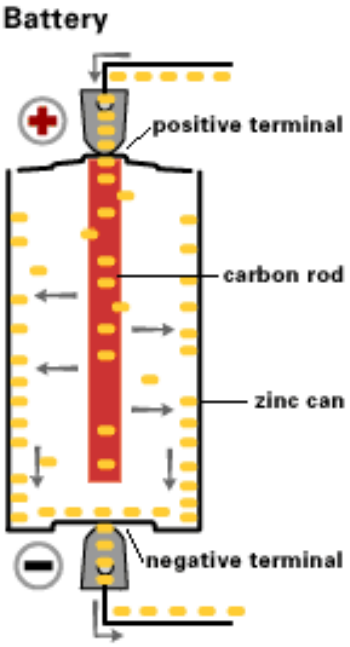


(symbol in schematic diagrams)

BATTERIES:

Batteries produce a _____ by using _____ to produce a difference in electrical potential energy between the positive and negative terminals.

Electrons are pushed from the _____ terminal to the _____ terminal.

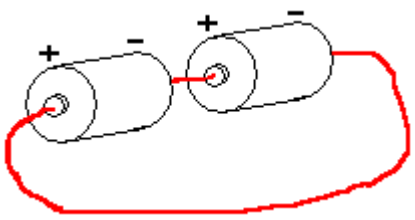


- The size of the _____ is called _____
- Electrons at the negative terminal are _____ and therefore have _____ (pressure) and want to get away from each other.

Batteries can be connected in **TWO** ways:

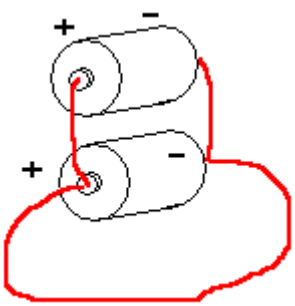
1) **SERIES**: _____.

Schematic Diagram:



2) **PARALLEL**: _____.

Schematic Diagram:



SHORT CIRCUIT:

If a circuit is interrupted allowing a current to travel down an _____path, it causes too much _____in a wire. That is called a_____.

The excessive current can either cause the power source (like a_____) to heat up, "short" and be destroyed; or a _____(if it is doing its job) to blow, breaking the flow of current in the circuit.

At home, a short circuit can be _____and _____to your appliances and electronic devices. The most common cause of a short circuit in the home is _____ touching when they shouldn't.