**Measuring Current:**

The flow rate of water passing through a hose can be calculated by dividing the amount of water passing a point by the time,

 **flow rate = amount of water passing / time**

Electric current is the flow rate of electrons passing through a wire. Current can be calculated by dividing the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the \_\_\_\_\_\_\_\_\_\_\_\_\_,

 **current = charge passing a point / time**

 **I = Q/t**

* The **unit** of measure for current is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The **symbol** for current is \_\_\_\_\_\_\_\_
* **Current** is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (or amount of electrons) that pass through a wire per \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (second)

**Ammeter**

* measures the amount of current flowing past a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a circuit
* it is connected in \_\_\_\_\_\_\_\_\_\_\_\_\_\_

The **ammeter** shows the current at this point

**Video: Electricity – Current**

1. Ben Franklin thought the charge on clouds was \_\_\_\_\_\_\_\_\_\_\_\_\_\_. We now know it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The flow of charge is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. In a battery, electrons flow from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. A light bulb turns electrical energy into \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy.
5. How is alternating current different from direct current?
6. A solar cell converts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into electrical energy. A thermocouple converts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into electrical energy.
7. A wire hold electrons much like a pipe that is full of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. Current (I) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Is defined as the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ passing a point in a given \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. One coulomb of charge is equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrons.
9. 1 ampere = 1 coulomb per \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Therefore 5 C past a point in 2 s gives a current of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.