

Guiding Question: What is electricity?

Learning Goal: Describe how electricity needs to flow to light a light bulb.

Agenda

- 1) Electricity Pretest
- 2) Waves Test results
- 3) Lighting a light bulb activity
- 4) John Travoltage
- 5) Notes on Electricity

**Introduction to Electricity**

Words of the day

Current

Circuit

Electricity

Electrons

## **Check your test Grade**

**2nd: k53hj**

**4th: k53hf**

**9th: k53h2**

## **Take the Pretest**

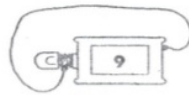
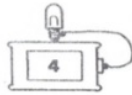
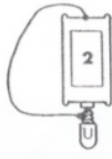
**2nd: ktrp4**

**4th: ktrpp**

**9th: ktrpy**

# Prediction Sheet 1


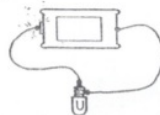
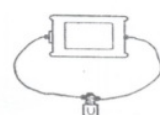



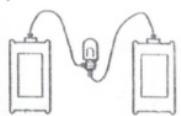



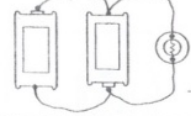
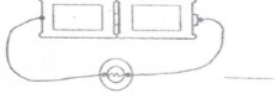
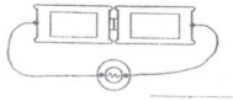
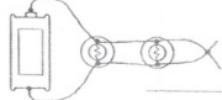
Will the bulb light? If you are not sure, try it and see!



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## Prediction Sheet 2

In which examples will the bulbs light? Mark a  $\checkmark$  for those which *will* and an X for those which *will not* light.

1 	2 	3 	4 
5 	6 	7 	8 
9 	10 		
11 	12 		
13 	14 		

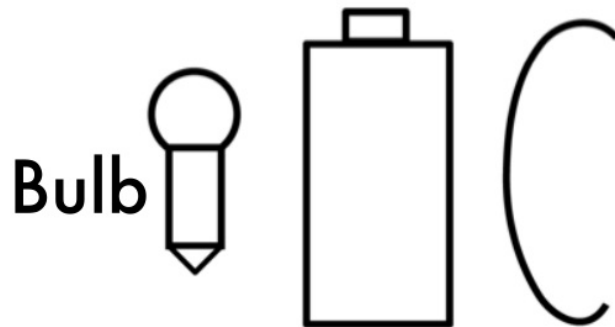
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# Electrical Circuits

## CEE

**Claim:** Answer the question

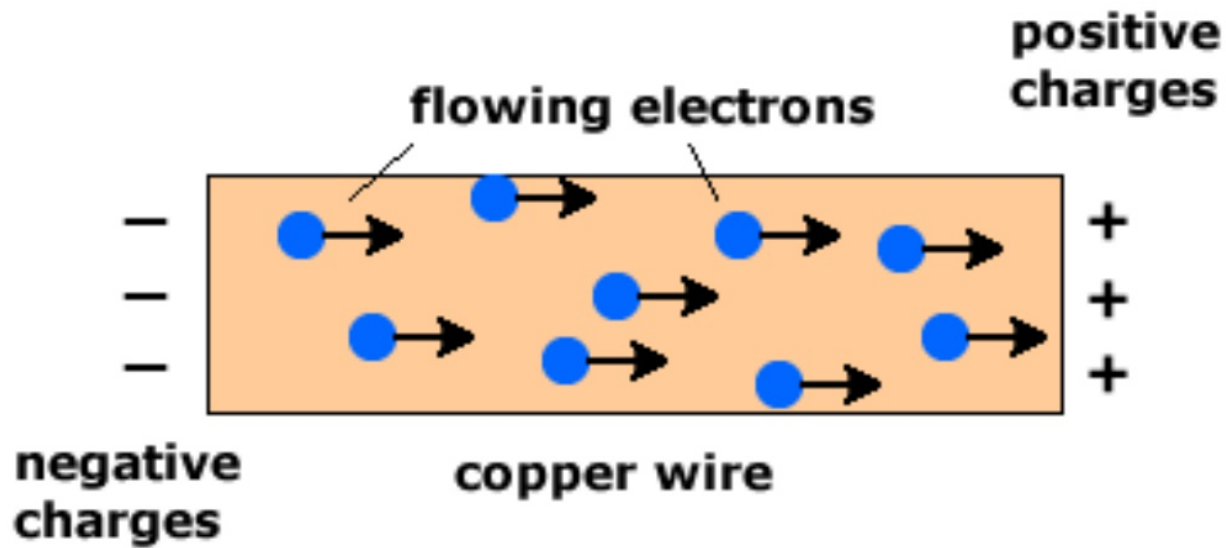
**Evidence:** Give examples of what worked and didn't work, draw pictures.



**WOD**

# **Electricity**

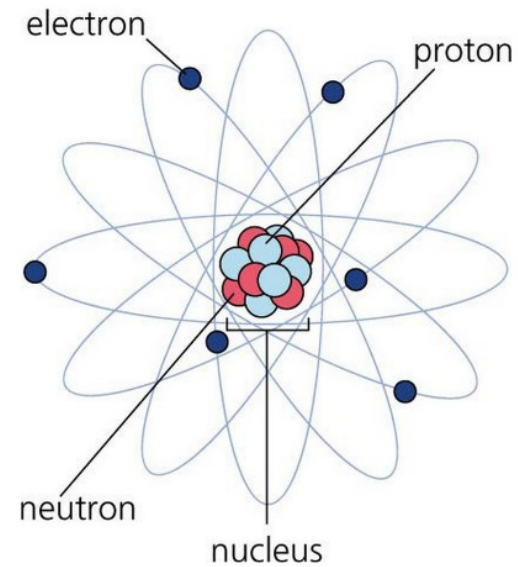
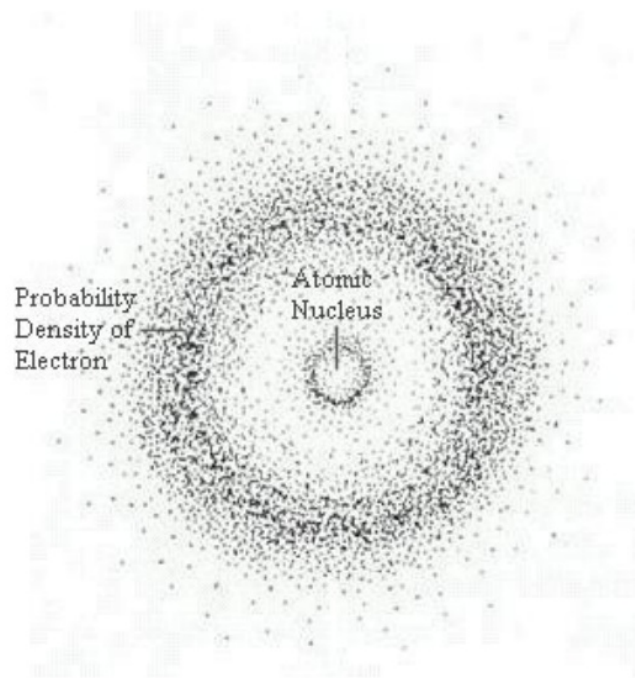
## **Moving electrons**



**WOD**

## **Electrons**

**Negatively Charged part of an atom (subatomic particle) found moving around the outside of the nucleus of an atom.**

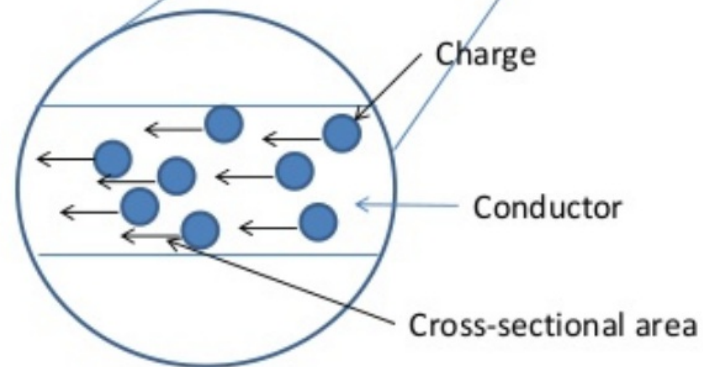
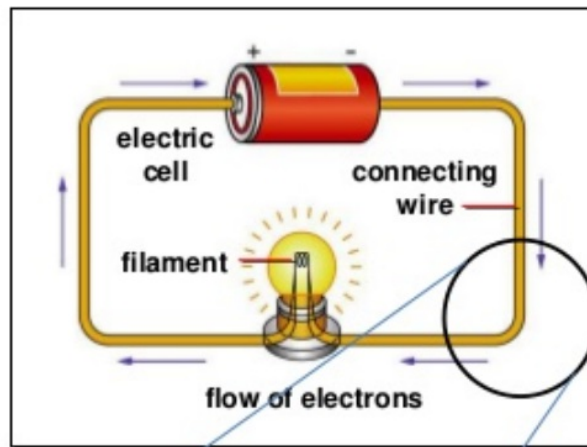


WOD

## Electric Current

### Definition:

An electric current is the rate of **flow of electric charges** in a circuit.

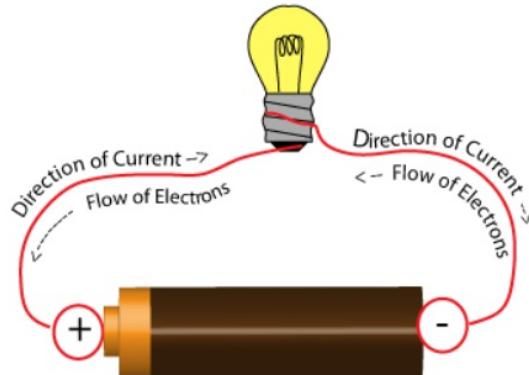




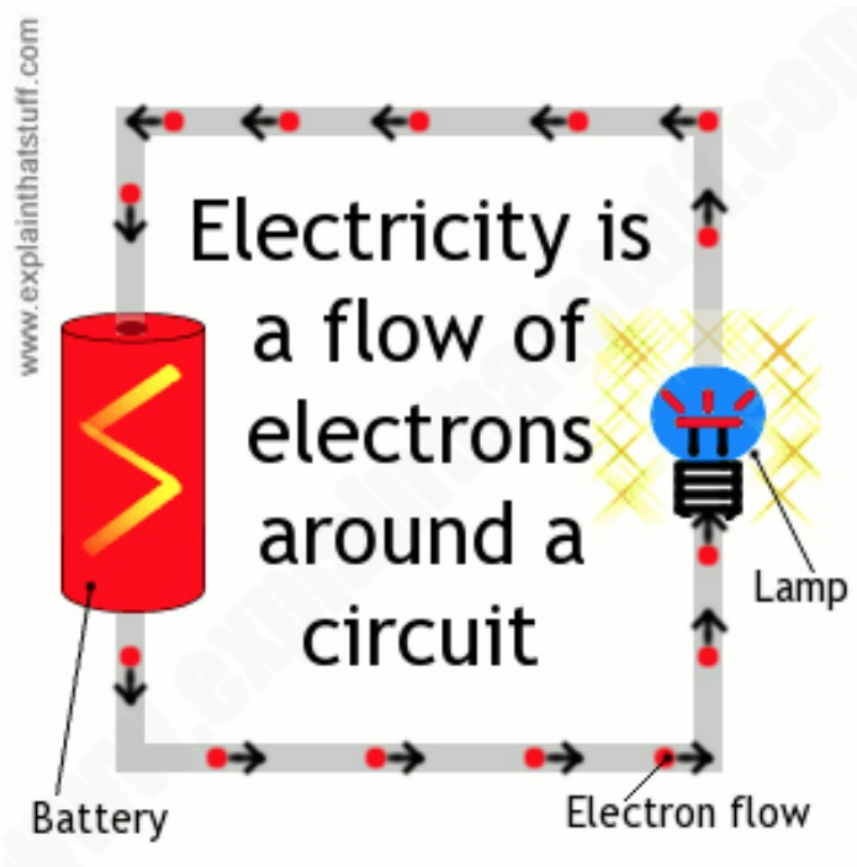
WOD

## Circuit

**An electric circuit is a path in which electrons from a voltage or current source flow.**



# Explanation: Using the words Electron, Circuit, and current write an explanation



**No DSR**



# Light the bulb challenge!

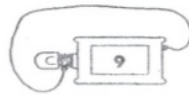
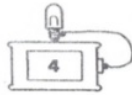
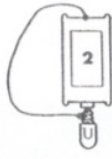
*with only....*

- one wire
- one light bulb
- one battery



# Prediction Sheet 1


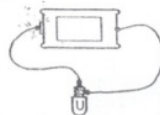
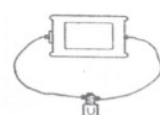



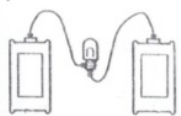



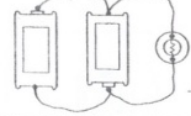
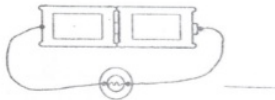
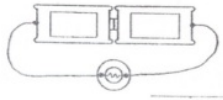
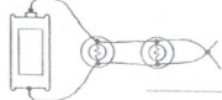
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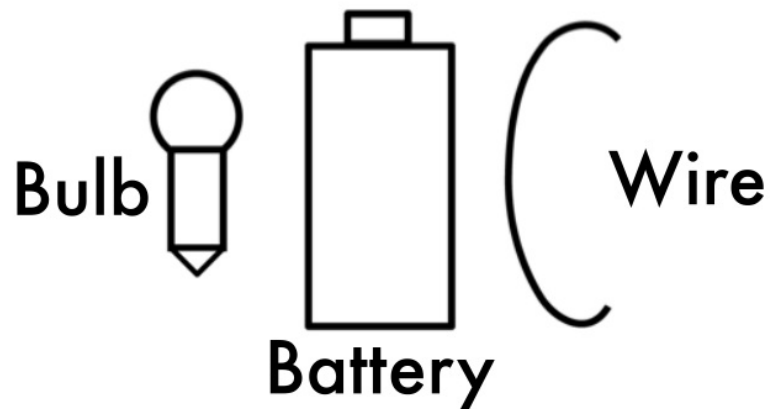
**What are some of the rules for lighting a light bulb?**

# Electrical Circuits

## CEE

**Claim:** Answer the question

**Evidence:** Give examples of what worked and didn't work, draw pictures.

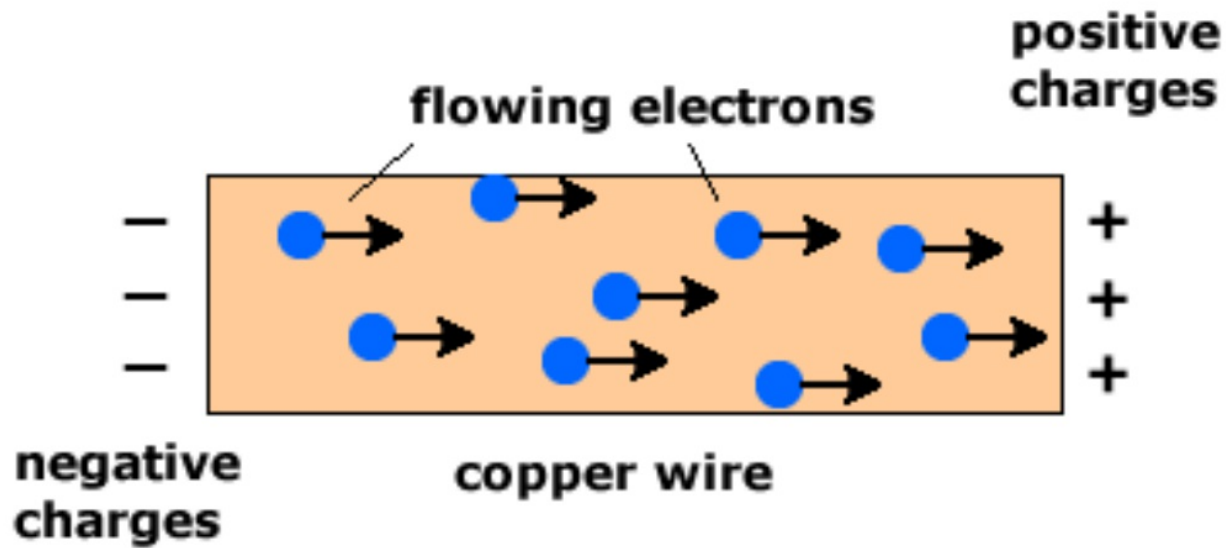




**WOD**

# **Electricity**

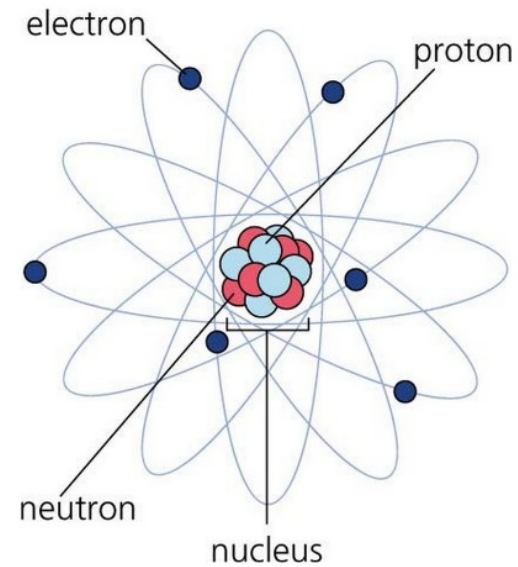
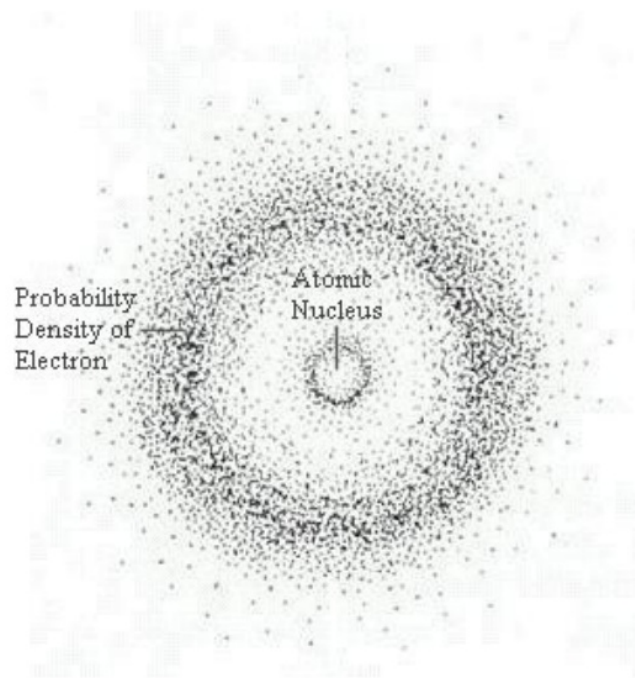
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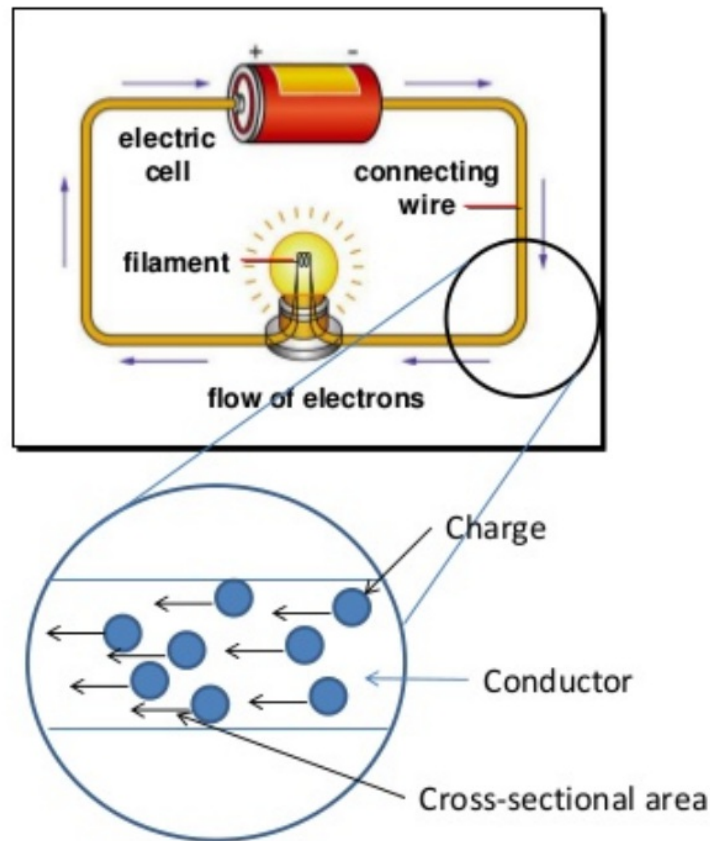


WOD

## Electric Current

### Definition:

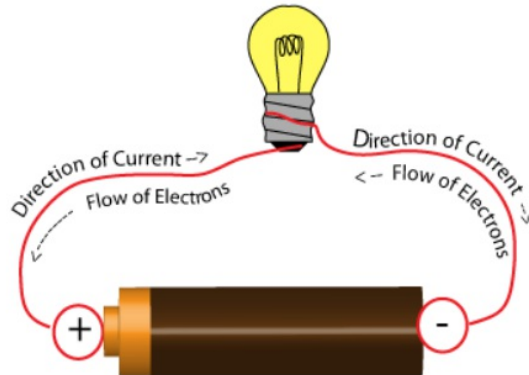
An electric current is the rate of **flow of electric charges** in a circuit.



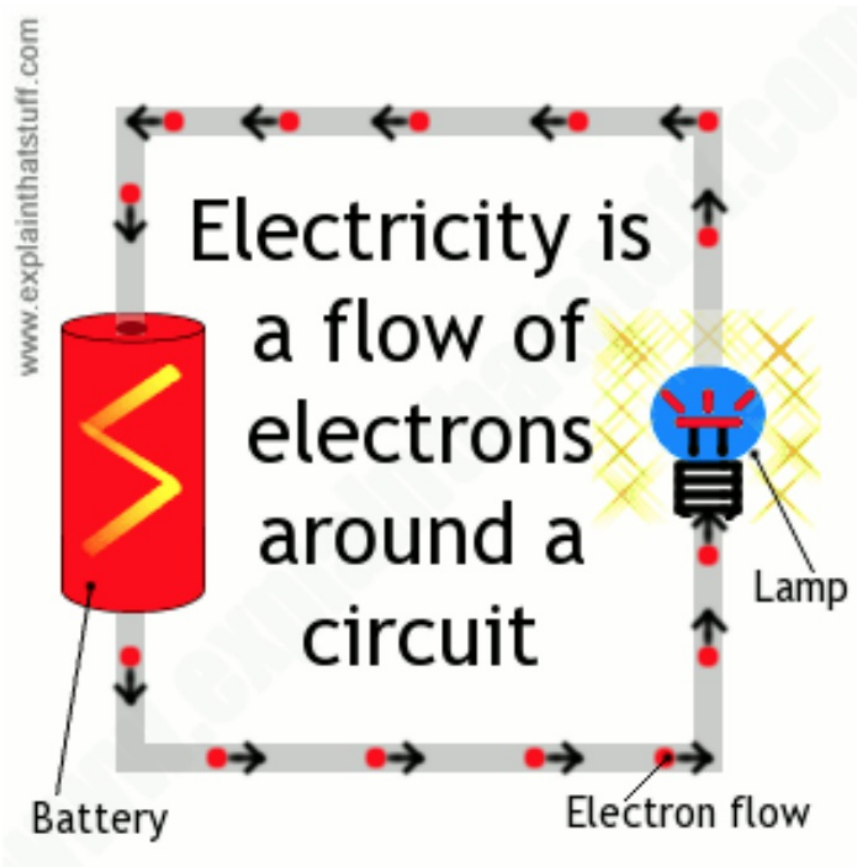
WOD

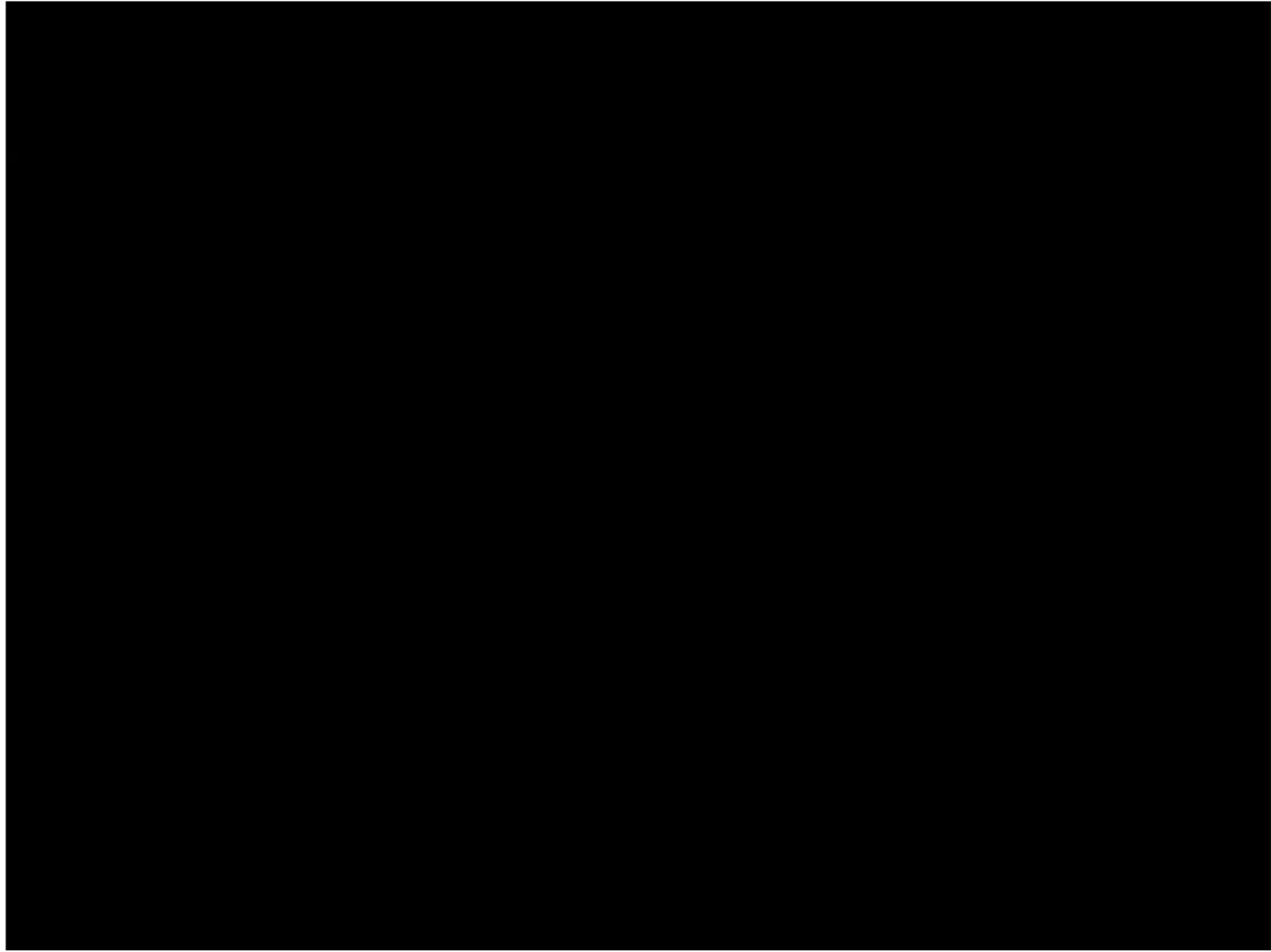
## Circuit

**An electric circuit is a path in which electrons from a voltage or current source flow.**



**Explanation: Using the words Electron, Circuit, and current write an explanation**





# Exit Ticket

## Charge and Circuits Practice

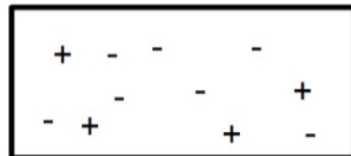
Name: \_\_\_\_\_

1. A negative charged particle will attract a \_\_\_\_\_ particle.
2. A positive charged particle will repel a \_\_\_\_\_ particle.
3. There are 5 positive and eight negative charges in a box, what is the total charge of the box?

4. Draw in the charges need to make this box neutrally charged.

# of Negative: \_\_\_\_\_

# of Positive: \_\_\_\_\_



5. You are walking on the carpet in socks, and reach for the door knob. Before you touch it you get a shock! Describe the process that caused the shock.

\_\_\_\_\_