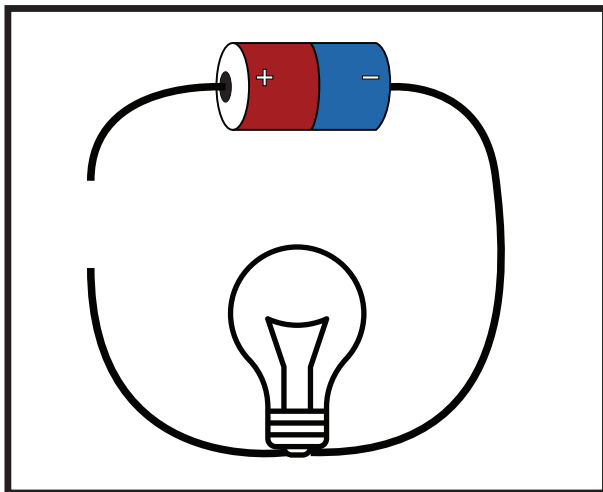


Name: \_\_\_\_\_

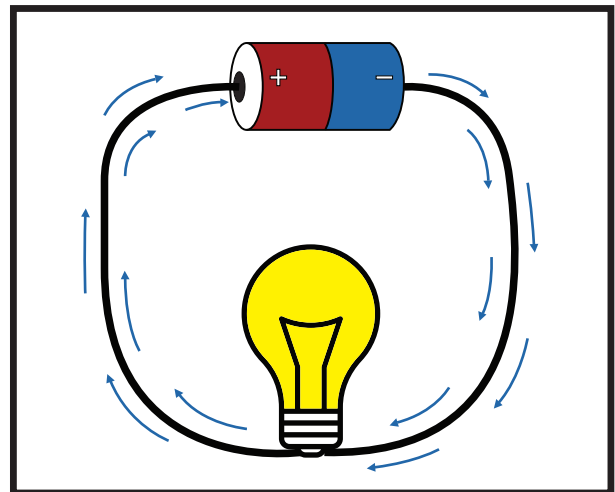
# ELECTRICITY

Electricity energy is from moving electrons.

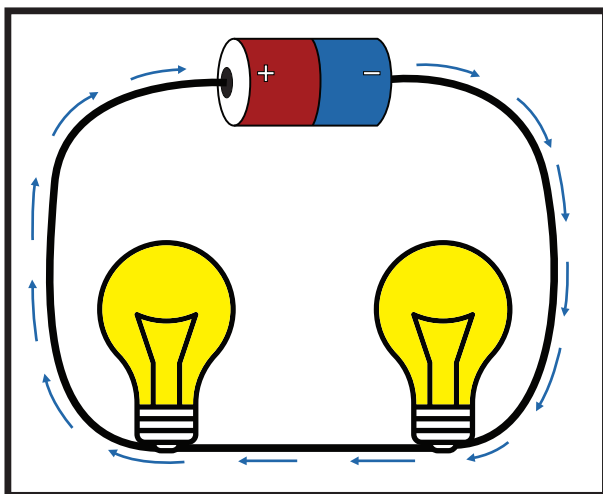
Open Circuit



Close Circuit

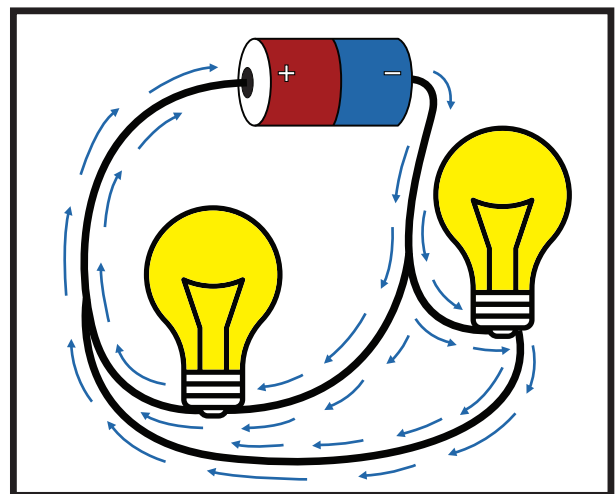


Series Circuit  
(One path)



A break will stop the whole current.

Parallel Circuit  
(more than one path)



A break may not stop all the current.

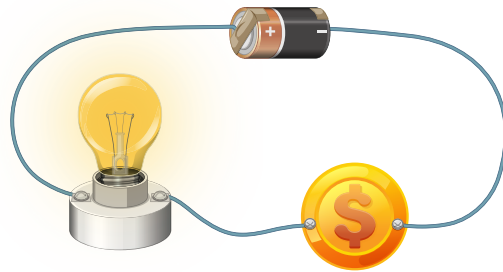
Name: \_\_\_\_\_

# CONDUCTORS AND INSULATORS

A **conductor** is a material that allows electricity to flow through it.

A **insulator** is a material that electricity cannot flow through.

To determine whether an object is a conductor or insulator, you can build a simple circuit with a battery, light bulb, and three pieces of wire.



Touch the free ends of the wire to the object you are testing. If the light bulb lights up, the object is made from a conductor, if it does not the object is made from an insulator.

Directions: Complete the table. Predict whether each item is made from a material that is a conductor or insulator. Then test each item to determine if it is made from a conductor or insulator.

Object	PREDICTION: Conductor or Insulator	RESULT: Conductor or Insulator
rubber band		
penny		
nickel		
toothpick		
key		
paper clip		
paper fastener		
glass		
tshirt		
leaf		
drop of water		

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

# ELECTRICITY

## Conservation & Safety

Direction: Choose the correct word from the box and complete the sentences.

YANK/PULL

PLUG

KEEP

CLIMB

SAFETY

FLY

Don't \_\_\_\_\_ the fence around electrical substation.

Don't \_\_\_\_\_ a bunch of things into one outlet.

Don't \_\_\_\_\_ an electrical cord from the socket.

Don't \_\_\_\_\_ kites close to the power lines.

Don't \_\_\_\_\_ water near electrical points.

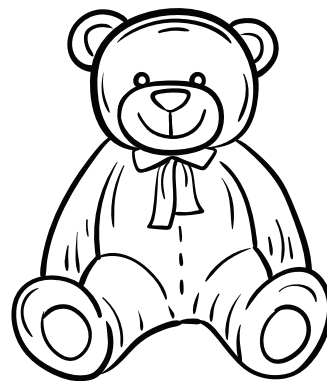
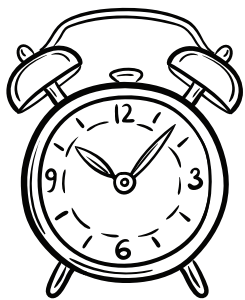
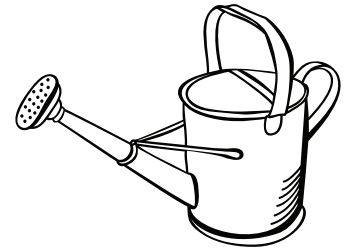
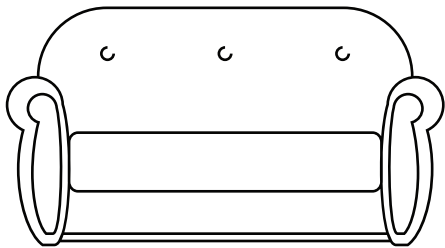
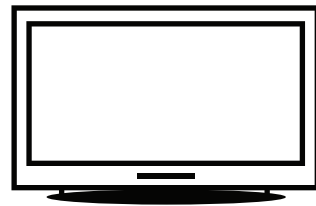
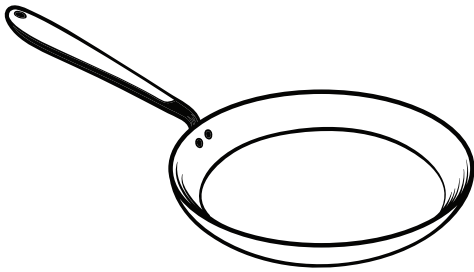
Put \_\_\_\_\_ caps on all unused outlets.

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

# ELECTRICITY




## Electrical Appliances




Direction: Color the items that cannot work without electricity.





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

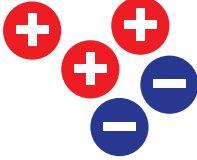
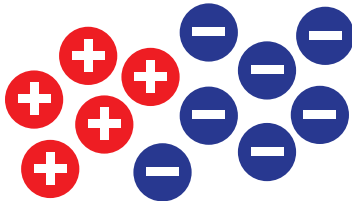
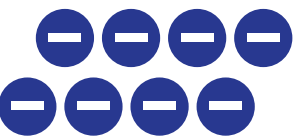
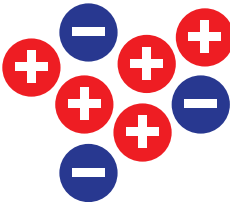
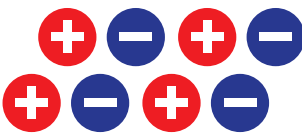
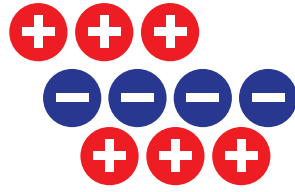
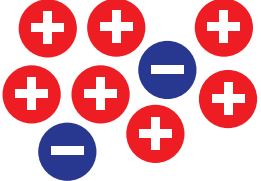
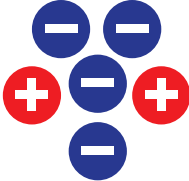
# ELECTRICAL CHARGES

If an object has more **positive charges**   
 than **negative charges**   
 its electrical charge  
 is **positive** 

If an object has more **negative charges**   
 than **positive charges**   
 its electrical charge  
 is **negative** 

If an object has the same  
 number of **positive charges**   
 and **negative charges**   
 its has no electrical charge.  
 or **neutral**

Direction: Count the positive and negative charges in each picture.  
 Color the box with the correct charges.

	POSITIVE NEGATIVE NEUTRAL		POSITIVE NEGATIVE NEUTRAL
	POSITIVE NEGATIVE NEUTRAL		POSITIVE NEGATIVE NEUTRAL
	POSITIVE NEGATIVE NEUTRAL		POSITIVE NEGATIVE NEUTRAL
	POSITIVE NEGATIVE NEUTRAL		POSITIVE NEGATIVE NEUTRAL

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



# ELECTRICAL CIRCUIT

Symbols used to represent circuit parts:

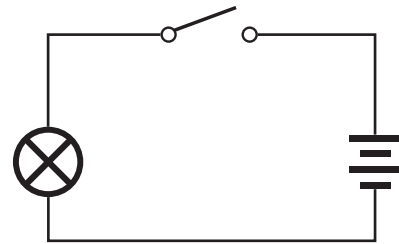
Battery: 

Wire: 

Light Bulb: 

Switch:  open  
 closed

Circuit Diagram:



Direction: Draw a circuit diagram inside the box.

