

**Activity 7: Complete the sentences about circuits by selecting the correct words.**

- 1- When there is a break in the circuit the components (will work- will not work)
- 2- When the switch is open, the electricity (can- cannot) flow.
- 3- When the switch is closed, the electricity (can-cannot) flow. This means the buzzer (will-will not) work.
- 4- You can make a lamp in a circuit brighter by (adding more bulbs- add a switch - add more batteries)

**Activity 8: Match each description to the correct word.**

1-This makes a break in the circuit electricity cannot flow

Particles  
(electrons)

2-These flow around the circuit and create electricity.

Component

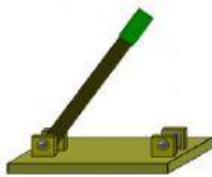
3-This completes the circuit and electricity can flow.

Closed switch

4-This slows down the flow of electricity but does not stop.

Open switch

**Activity 9: Match the components with the words.**



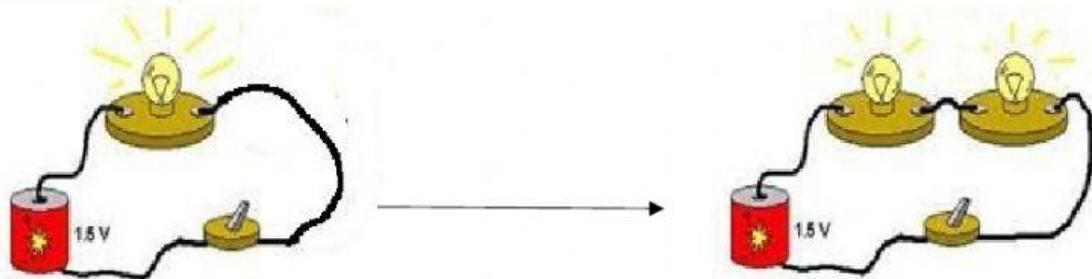
**Battery**

**Lamp (bulb)**

**Wire**

**Switch**

**Activity 10: What will happen if you add lamps to the circuit? Tick the correct box.**



-When we added another lamp to the circuit, the lamps.....

Got brighter

got less bright (darker)

Stayed the same

-What can you do to make both lamps brighter?

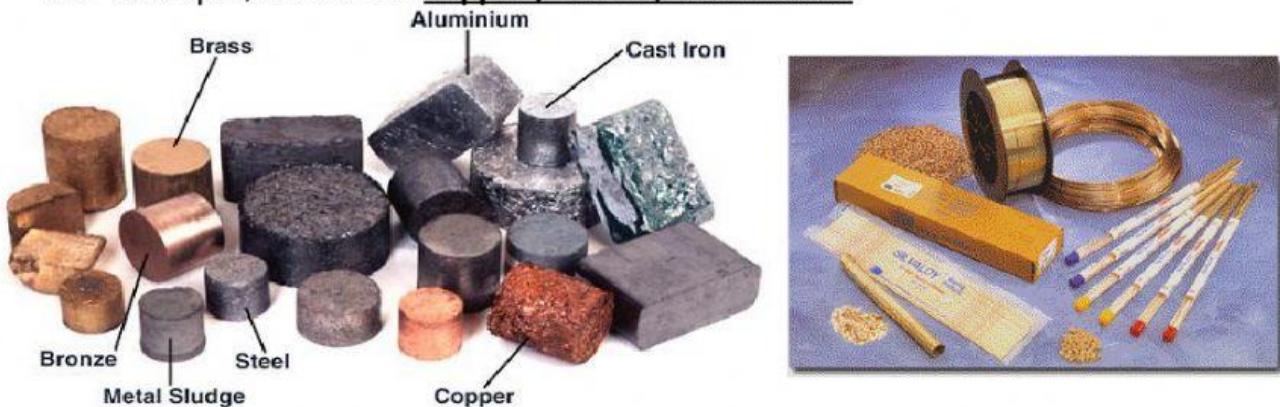
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## Electric conductors and electric insulators.

**Conductors** are materials that let electric charges move through them easily.

For example, metals as copper, silver, aluminium.



**Insulators** are materials that don't let electric charges move through them easily.

For example, wood, plastic rubber.

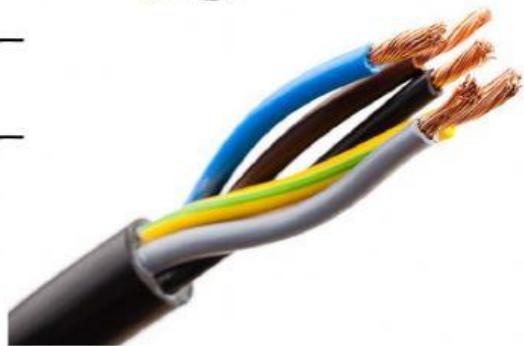
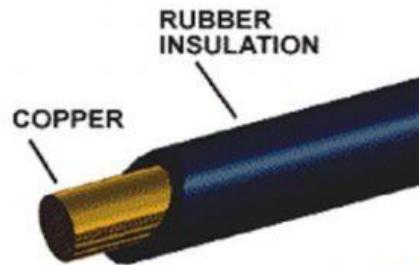


Activity 11: Can you explain why the electric wires are covered by insulators (rubber or plastic) while from inside they are made of an electric conductor (copper)?

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### Why do we use switches?

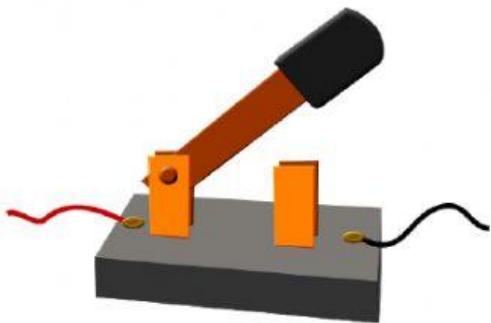
Switches are used to turn electricity on and off.

They are used in circuits to control the flow of electricity.

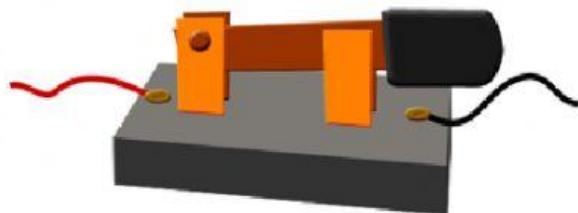
It would be very dangerous to leave all the lights and the appliances switched on all the time. It would also be very expensive.

Switches need to be conductors to complete the circuits.

Switches are put in insulators so they wouldn't cause electric shock.



Open switch

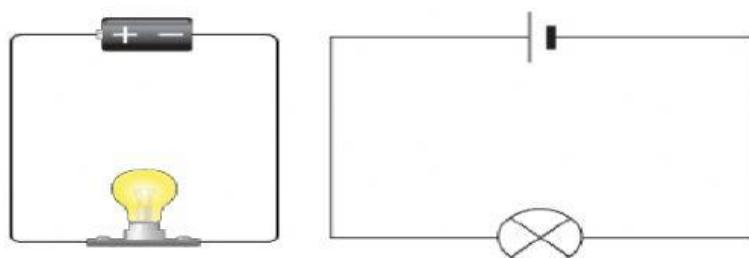


Closed switch

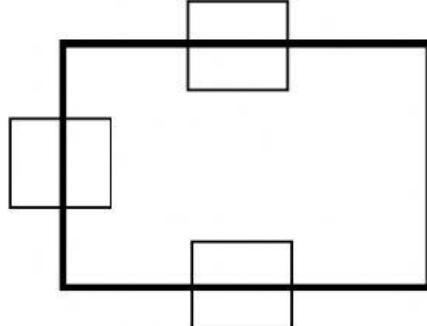
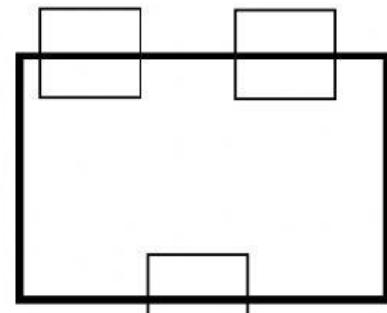
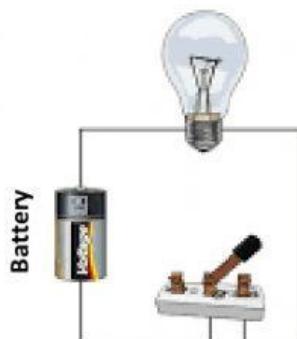
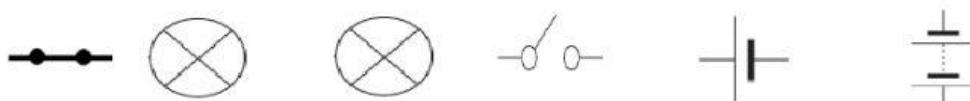
**Assessment Task 1: Using symbols to draw electric circuits.**



Closed switch      Lamp      Open switch      Cell      Battery      Motor

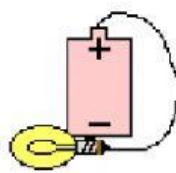
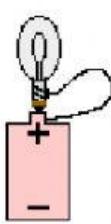
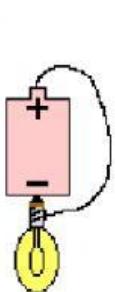
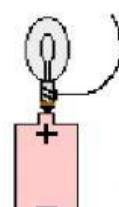
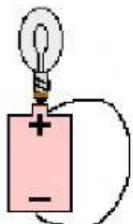
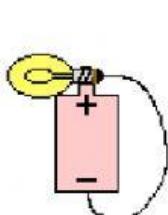
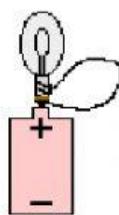
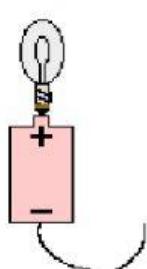
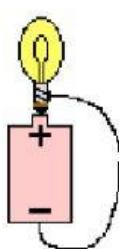


**In the box below drag and drop components to make the circuit in the diagram below:**

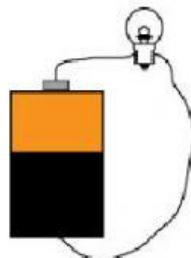
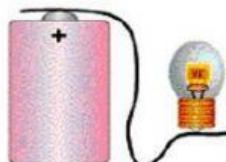


**Assessment Task 2: Click on all the circuits that will work.**

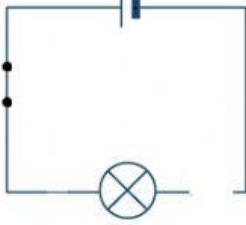
**Level 1: Hints!**



**Level 2: No hints.**

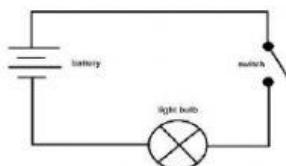


### Electricity True or False?

	STATEMENT	YES	NO	MAKE IT RIGHT
1	You don't need wires to connect an electric circuit			
2	 This is the symbol used to represent a cell.			
3	If you add another bulb to a circuit with one bulb, both lamps will become brighter.			
4	This is the symbol used to represent a lamp in a circuit. 			
5	The bulb in  this circuit will light.			
6	This diagram represents a complete circuit. 			

The bulb in this circuit will light.

7

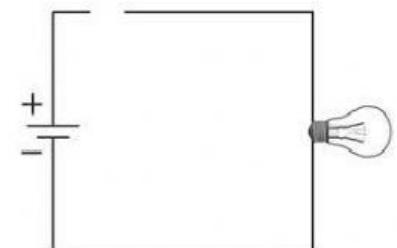


Activity 12: Which of the following objects can you use to complete the circuit below? Plastic cup - wooden spoon - iron nail - Paper. Explain your choice.

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open circuit