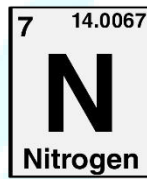
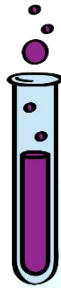
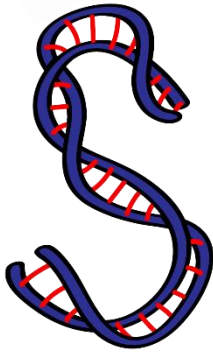




**ASPIRE**  
INTERNATIONAL SCHOOL



Science Department

2023/2024

Year 4

Term 3, Week 4

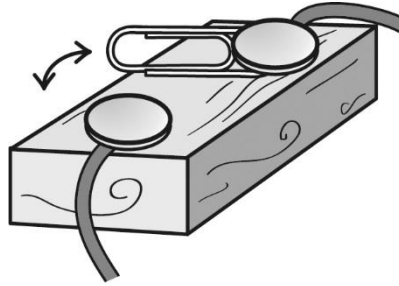
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Name: .....

Class: .....

1) Here is a picture of the switch you have used in the circuits you have made.



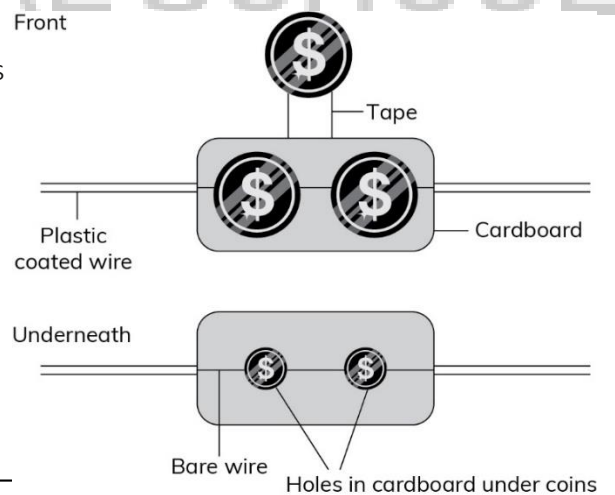
1 Why do we use a metal paper clip and metal drawing pins to make the switch?

2 Why do we use a wooden base to make the switch?

3 Suggest another material we could use for the base.

4 How do you close the circuit with this switch?

2) Ahmad and Umar are making a switch. Look at the materials they used.



1 Why did they use coins to make their switch?

---

2 Why did they use cardboard as a base?

---

3 How do you close the circuit with this switch?

---

3) What must you do to close the circuit?

---

4) Oliver places a copper coin in the circuit.

Predict what will happen to the lamp.

Explain your answer.

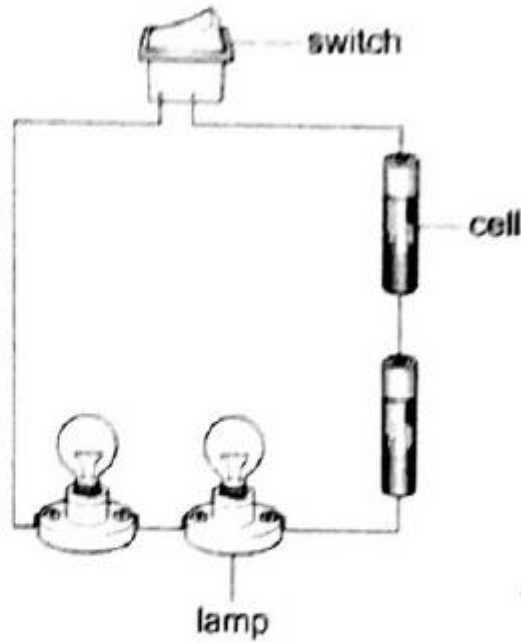
The lamp will .....

This is because .....

5) Which component is added to open and close an electrical circuit?

.....

6) Kofi has built an electrical circuit.



(a) The lamps are **off**.

What does Kofi do to turn the lamps on?

.....

7) When the **switch** is closed the circuit does **not** work.

Why is this?

Tick (✓) the correct box.

More than one lamp is needed.

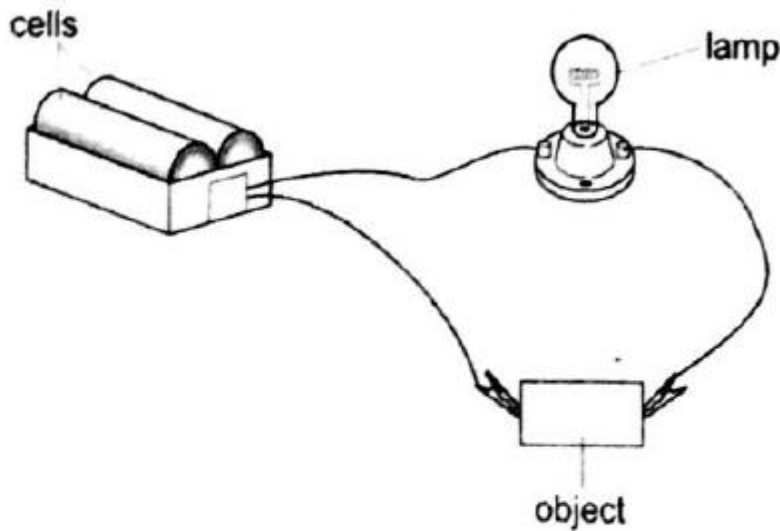
More than one switch is needed.

The cell is the wrong way round.

The circuit is not complete.

The switch must be open.

8) Lily puts different objects in this electrical circuit.

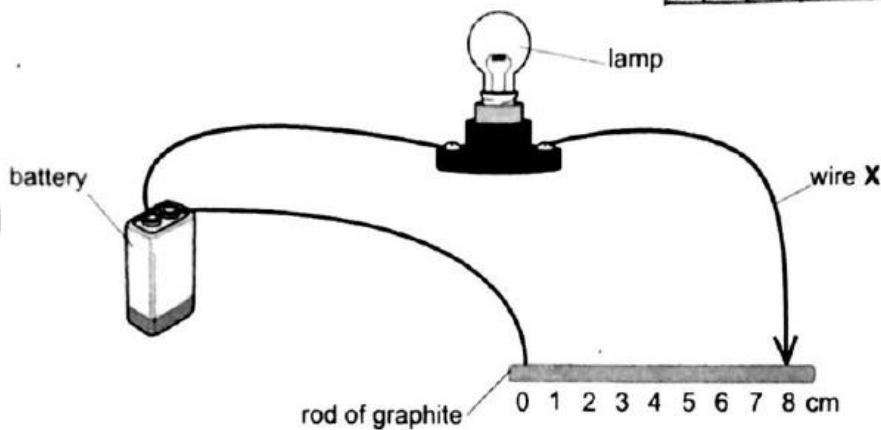


Predict what will happen if the object is a **good conductor**.

Predict what will happen if the object is a **bad conductor**.

9) Hassan and Mike connect an electrical circuit.

*7 au*  
A/M/18/02/6



Hassan moves the wire X from 0 cm to 8 cm.

Mike writes down how bright the lamp is for each distance.

He uses a scale from 0 to 100.

100 is the brightest on the scale.

Here are the first three results.

Activ \_\_\_\_\_

distance in cm	brightness of lamp
0	100
2	80
4	60
6	
8	

(a) Complete the sentence.

As the distance increases the brightness of the lamp .....

(b) Predict the brightness of the lamp for the distance of **6 cm**.

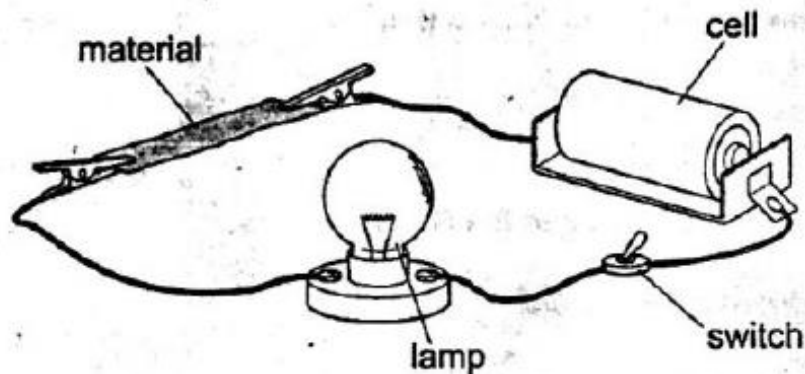
Circle the correct answer.

- 0                      20                      40                      60                      80

Tomas and Jakub investigate electrical conductors.

10)

They put different materials in an electric circuit.



(a) They keep the length of the material the same each time.

Why do they do this?

