

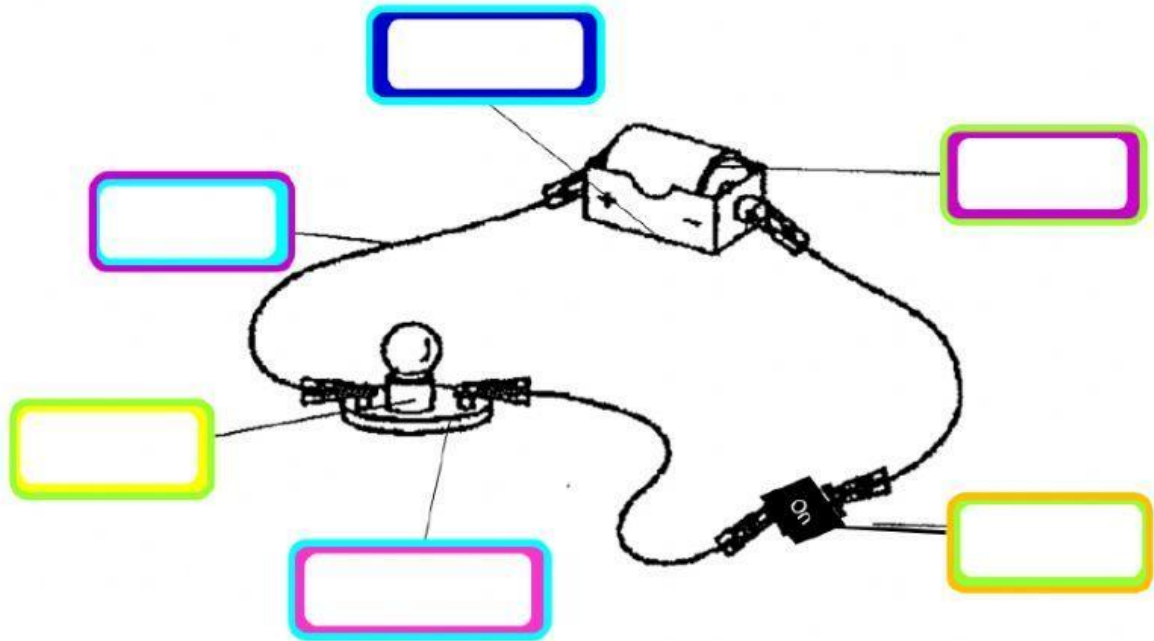
Name: \_\_\_\_\_

**SCIENCE** Class 5CI\_\_\_\_\_

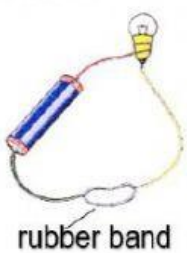
Date: \_\_\_\_\_

Topics: Unit 5 Electrical Conductors and Insulators

1. Look at circuit below and label its components.

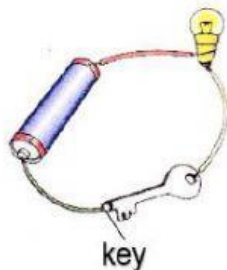


2. Which circuits used conductor or insulator materials.  
Match.



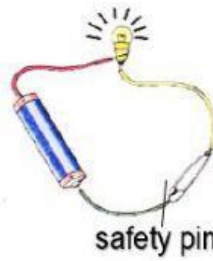
**conductor**

**insulator**



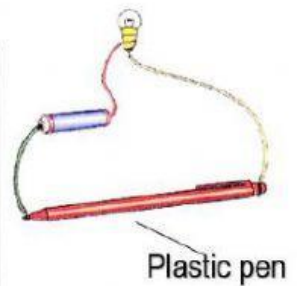
**conductor**

**insulator**



**conductor**

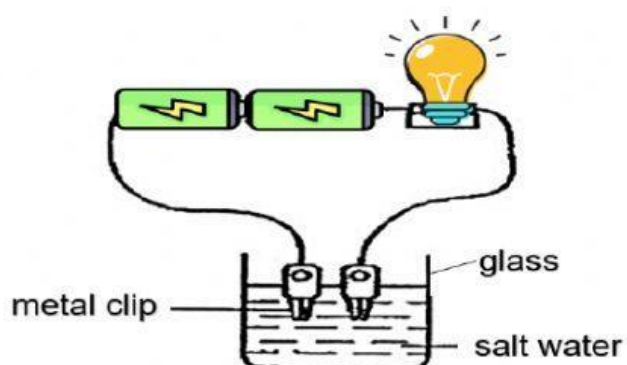
**insulator**



**conductor**

**insulator**

3. Jansen sets up an experiment as shown below.  
When the metal clips are soaked in salt water, he observed that the **bulb lit up**.

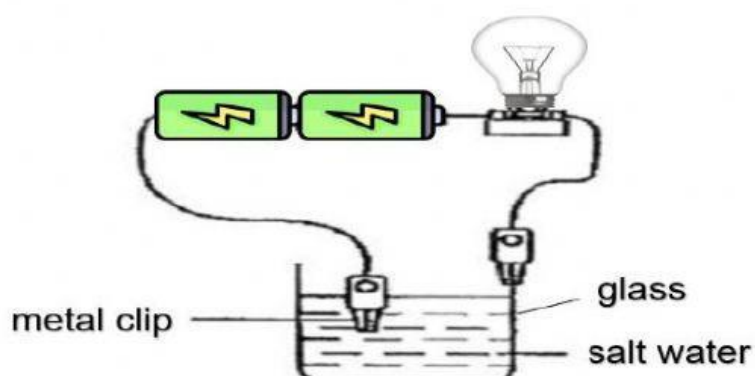


Based on Jansen's observation, what can he say about the water?

**01** Saltwater is conductor. ►

**02** Saltwater is insulator. ►

Jansen connected one of the metal clips to the glass as shown below.

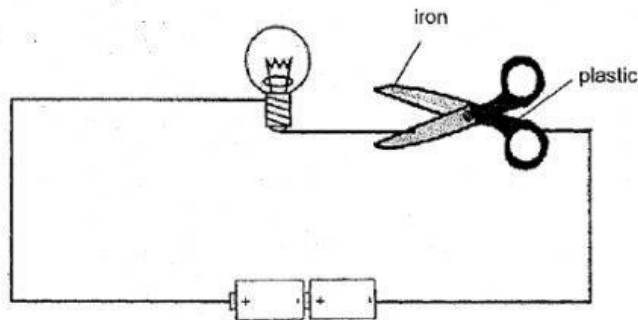


Would the bulb light up?

**YES**

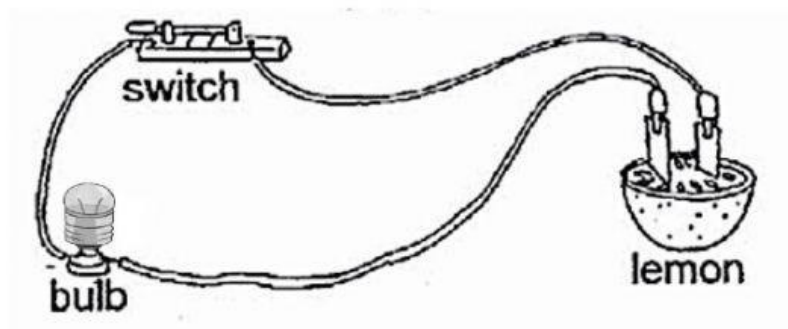
**NO**

4. Will the bulb light up?



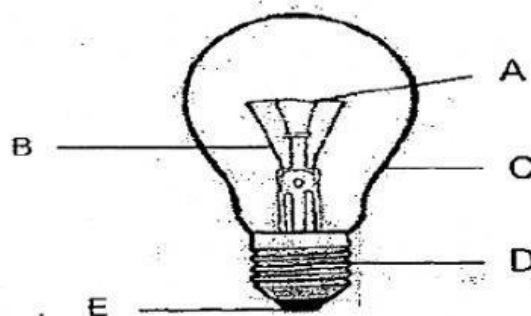
Yes
No

5. Will the bulb light up?



Yes
No

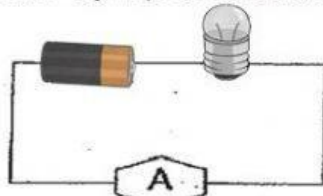
6. The diagram below shows the parts of a bulb.



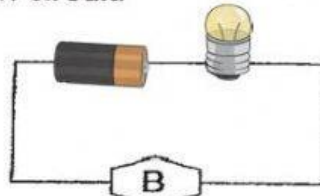
Which of the following best describe the parts of the bulb?

	Conductors of electricity	Insulators of electricity
(1)	A, D, E	B, C
(2)	A, B, D, E	C
(3)	A, B, C	D, E
(4)	C, D, E	A, B

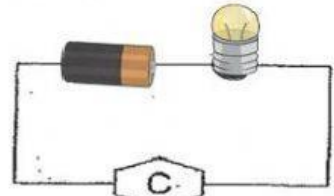
- 7., Kelly was given three circuits X, Y and Z as shown below. The bulbs and batteries in all the circuits are new and identical. Different objects, A, B and C, are connected in each circuit.



Circuit X



Circuit Y



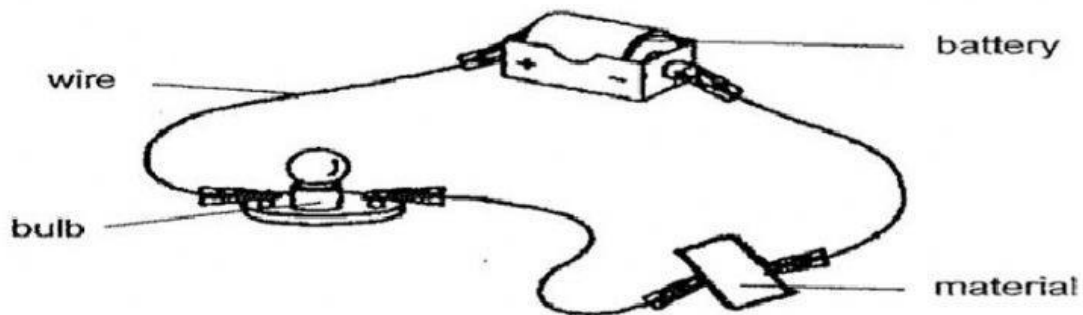
Circuit Z

Kelly made the following observations in her notebook.

- The bulb in circuit X did not light up.
- The bulbs in circuits Y and Z lighted up.
- The bulb in circuit Y was brighter than the bulb in circuit Z.

Which of the following is possible?

- (1) Object A is made of metal.
  - (2) Object C is another light bulb.
  - (3) Object B is an electrical insulator.
  - (4) Objects B and C are identical electrical wires.
8. Jonas set up a circuit tester as shown in the diagram below. He wanted to find out if the materials, P, Q and R, could conduct electricity.



The results of the test were as follows:

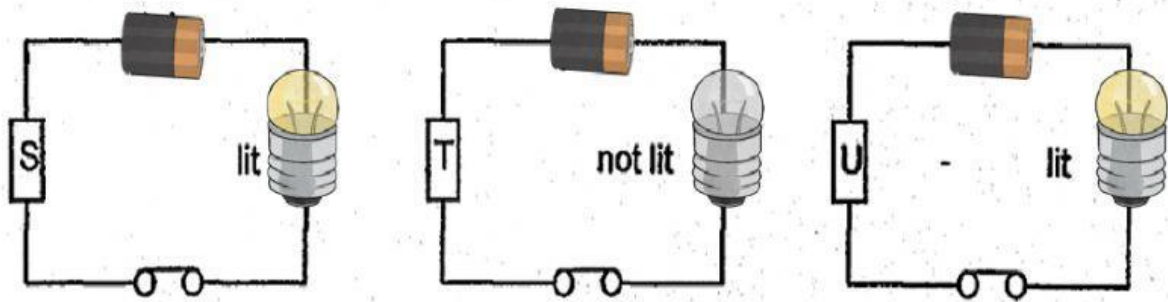
Material	Did the bulb light up?
P	Yes
Q	No
R	Yes

Which one of the following could represent materials P, Q and R?

	P	Q	R
(1)	cotton	plastic	gold
(2)	gold	wood	aluminium
(3)	glass	aluminium	copper
(4)	copper	rubber	cotton

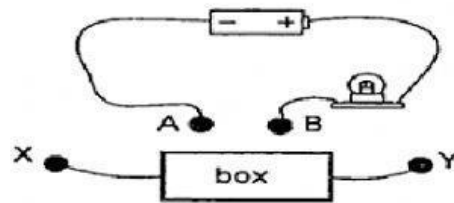


9. The diagram below shows what happens when different materials S, T and U are each connected in a separate circuit.



Which material is not an electric conductor?

10. Study the circuit below carefully.



When the wires X and Y of a box are connected to A and B of the circuit respectively the bulb lights up.  
Which one of the following boxes is used?

