

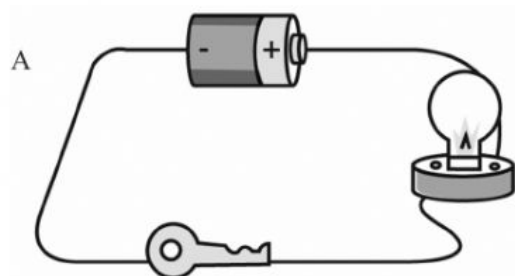
Worksheet 5.1a

Electrical conductors and insulators

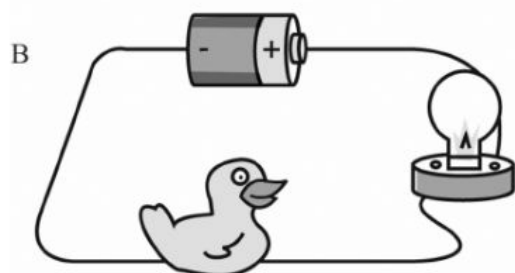
Name: _____ Date: _____

Will the bulb light up in each of the following circuits?

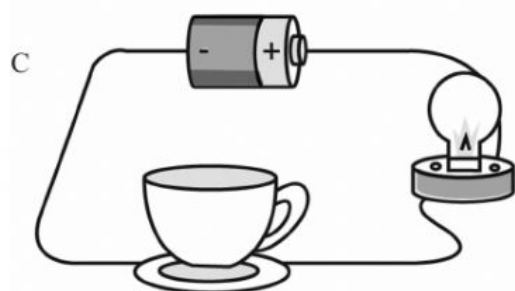
Write YES or NO alongside each



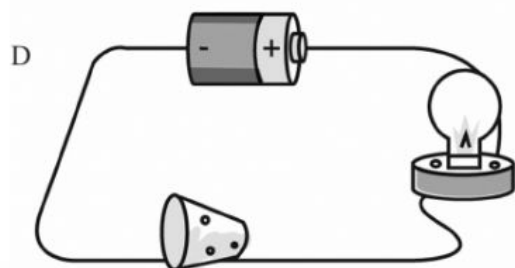
metal key



plastic duck



china cup



cork

Worksheet 5.1b

Test materials to see if they conduct electricity

Name: _____ Date: _____

Use this table to record your predictions and results for Activity 5.1.

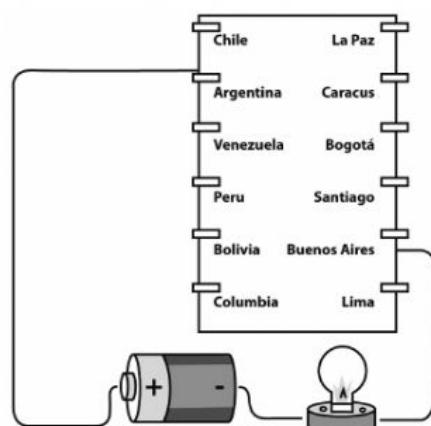
Material	Prediction: conductor or insulator	Result: conductor or insulator
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Worksheet 5.1c

Make an electrical quiz

Name: _____ Date: _____

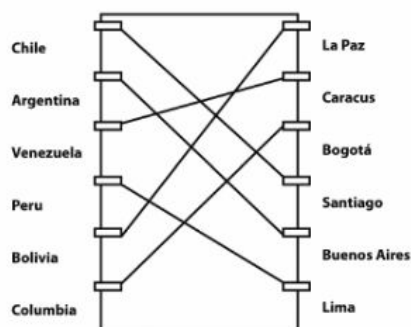
Write the names of the countries and their capitals on the card as shown in the diagram. We have shown some countries in South America but you can use different countries if you want to.



You will need:

- a piece of stiff card about 30 × 15 cm
- 12 metal paper clips
- 1.5 V cell
- bulb in bulb holder
- about 3 m connecting wire, wire cutters or scissors and sharp knife.

Cut six lengths of wire and fix one end of each wire to paper clips as shown in the diagram.



Make a circuit with the cell, the lamp and the wire as in the first diagram. You will use the free ends of the wire to play the game.

To play the game, ask your friend to tell you the capital of one of the countries. Move the free ends of the wire to touch the country on one side of the card and the capital on the other side. If the answer is correct the light will come on.

1 Why does the bulb only light up when the correct answer is given?

2 Why did you use metal paper clips and not plastic coated paper clips?

Worksheet 5.3a

Test metals to see how well they conduct electricity

Name: _____ Date: _____

Use this table to record your predictions and results for Activity 5.3.

Metal	Prediction: conductor rating 1 (weakest) to 6 (best)	Amps measurement	Conductor rating based on results
1.			
2.			
3.			
4.			
5.			
6.			

Worksheet 5.3b

Identifying conductors and insulators

Name: _____ Date: _____

Complete the following table.

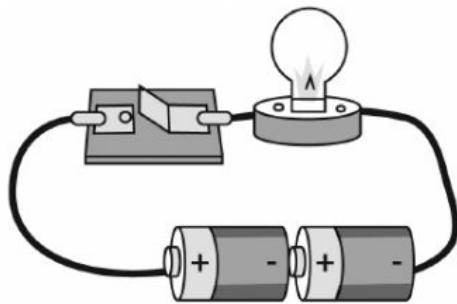
Object or substance	If I put this object or substance in an electric circuit will the bulb light up? Yes/No	Is the object a conductor or an insulator?
plastic button		
glass marble		
salt water		
chalk		
brass button		
iron nail		
wax crayon		
pure water		
aluminium baking tray		
plastic comb		

Worksheet 5.5

Draw a circuit using symbols

Name: _____ Date: _____

Here is an electric



Draw the circuit using circuit symbols in the space below.