

## Activity

8C

## Make a Circuit Tester



### Skills:

Create tables to show observations, learn to predict the possible results of a scientific activity, check results to see if they support a prediction, analyse results to answer a scientific question, learn to choose and use the right equipment



**Materials:**

1.5V cell  
Cell holder  
1.5V lamp  
Lamp holder  
Three alligator clip wires  
Cloth

Paper clip  
Ruler  
Aluminium foil  
Clothes peg  
Eraser  
Spoon

**Method**

- I Build the circuit tester using the cell, lamp and wires as shown. Ensure that the tester is working first by connecting the alligator clips to see that the lamp lights up.



- 2 Fill in the table with the material each object is made of and your prediction if the lamp will or will not light up.
- 3 Attach the alligator clip wires to the ends of each object.
- 4 Record your observations and conclusions for each object in the table below.
- 5 Find other objects and test if they are good electric conductors or insulators. Add your collected items to the table below. Be careful when choosing other materials. Use these appropriately. Remember that water is a good electrical conductor. Do not touch your circuits with wet hands or wet materials.

## Activity Book p.80

Object	Material	Prediction	Observation	Conclusion
		The lamp will / will not light up	The lamp lit up / did not light up	The object is an electrical conductor / insulator
paper clip	steel or aluminum	will	lit up	conductor
ruler	plastic	will not	not light up	insulator
aluminium foil	metal	will	lit up	conductor
eraser	rubber	will not	not light up	insulator
clothes peg	plastic/wood	will not	not light up	insulator
spoon	metal	will	lit up	conductor
cloth	cotton	will not	not light up	insulator