

CHAPTER

8

Electrical Circuits

Activity Book p.73

Activity

8A

Make Your Own Paper Clip Switch



Skills:

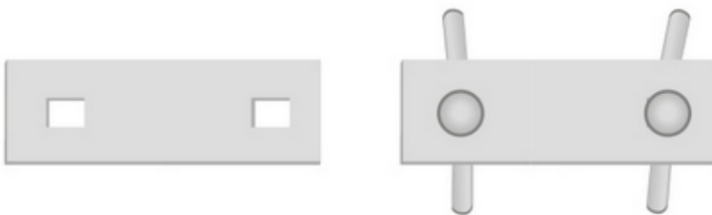
Do practical work safely, analyse results to answer a scientific question

Materials:

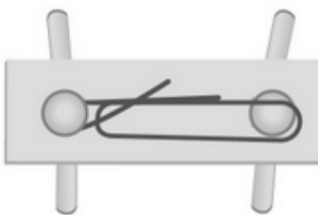
Scissors	Cell holder
Small cardboard	1.5V lamp
Two paper fasteners	Lamp holder
Paper clip	Three alligator clip wires
1.5V cell	

Method

- 1 Use the scissors to cut the cardboard into a rectangle of size 3 cm by 1 cm. Be careful when using the scissors. Ask your teacher for help if you cannot cut the cardboard.
- 2 Make two holes in the cardboard for your paper fastener to go through.
- 3 Put a paper fastener in each hole as shown.



- 4 Open the paper clip slightly and place it around the fasteners.

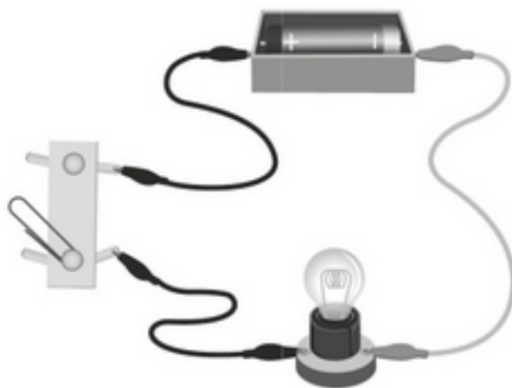


- 5 Build the circuit using the cell, lamp and wires as shown.

Activity Book p.74



- 6 Attach the alligator clips to the fasteners.



Activity Book p.74

- 7 What happens when the paper clip touches only one fastener?

The lamp will not light up, because it is an open circuit.

- 8 Move the paper clip down to touch both fasteners. What happens now?

The lamp lights up because the fasteners are connected and it became a closed circuit.

- 9 Fill in the blanks with the following words to complete the conclusion.

break

circuit

switch

The paper clip acts as a switch. It controls the flow of electric current in a circuit. A circuit will not work if there is a break in it.