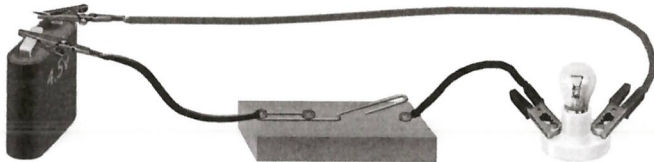


# How to Make a Simple Circuit

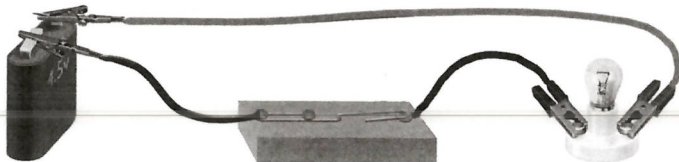
If a battery is connected to a bulb using two wires to make a circuit, the bulb lights up. If we add a switch the bulb can be turned on and off.



A switch makes a gap in the circuit. When the gap is open, the electric current cannot flow round the circuit. The electricity cannot jump across the gap.



When the gap is closed the electricity flows and the light comes on.



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## How to Make a Simple Circuit

### Section A

Choose the best word or group of words to fit the passage and put a ring around your choice.

To make a simple circuit you need two wires, a bulb and a

1 **switch.** **buzzer.** **motor.** **battery.**

If you have a gap in a circuit the

2 **light** **electricity** **sound** **water**

will not flow. If you have no gaps the

3 **light** **electricity** **sound** **water**

will come on. Switches can be used for controlling lights, radios and

4 **TVs.** **ADs.** **BCs.** **BBCs.**

In an emergency, switches can be used to get help using

5 **Inspector Code.** **Morse Code.** **Secret Code.**

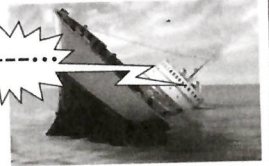
A push switch can be used

6 **to ring a door bell.** **detect burglars.**  
**put on the light.** **as a secret pressure pad.**

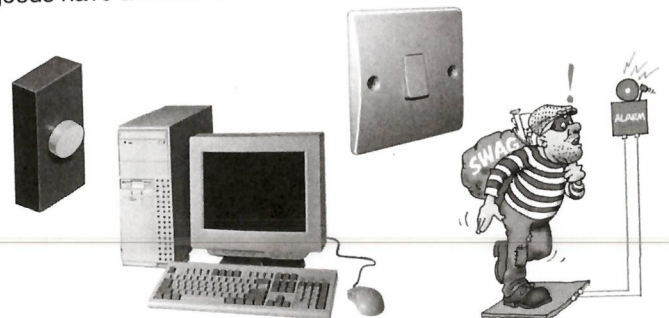
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Switches can be used for many jobs such as controlling lights, radios and TV sets. In an emergency, they can be used to get help using Morse Code.

A--- B--- C--- D--- E---  
F--- G--- H--- I--- J---  
K--- L--- M--- N--- O---  
P--- Q--- R--- S--- T---  
U--- V--- W--- X--- Y---  
Z---



Switches come in different shapes and sizes. A wall switch can be used for putting on the light inside a house. A push switch can be used to ring a door bell. Secret pressure pad switches can be used to detect burglars walking across a carpet. Most electrical goods have a switch to turn them on or off.



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### Section B

1 Fill in the table:

Morse Code	
F =	
	.. —
W =	

2 How do you make a simple circuit?

3 What does a switch do?

4 When can electricity not flow round a circuit?

5 What can switches be used for?

6 Why do you think switches come in different shapes and sizes?

7 Why do you think most electrical items have a switch?

8 Why would you want to detect a burglar walking across a carpet?

### Section C

Write a short story in which a burglar is caught by a burglar alarm.

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### Section A

- 1) battery.
- 2) electricity
- 3) light
- 4) TVs.
- 5) Morse Code.
- 6) to ring a door bell.

### Section B

1)	<table><tr><th>Morse Code</th><th></th></tr><tr><td>F=</td><td>..-.</td></tr><tr><td>U</td><td>..-</td></tr><tr><td>W=</td><td>.-.-</td></tr></table>	Morse Code		F=	..-.	U	..-	W=	.-.-
Morse Code									
F=	..-.								
U	..-								
W=	.-.-								

- 2) Connect a battery to a bulb using two wires.
- 3) Turns a light on and off/makes a gap in the circuit.
- 4) When there is a gap in the circuit.
- 5) To control lights, radios TVs etc.
- 6) It depends what they are being used for.
- 7) To switch electrical things on and off/save electricity/make it safe.
- 8) You could create an alarm to warn you that you were being burgled.