



Runnymede St. Edwards School – Knowledge Organiser

Subject: DT

Unit: Electricity –
Alarms

Year: 4

Term: Spring 1

Alarms use a wide variety of different switches, depending on what the alarm is used for.

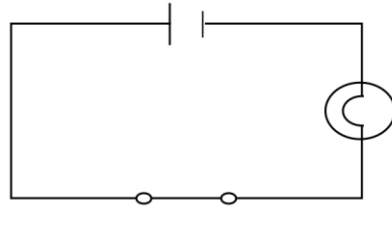
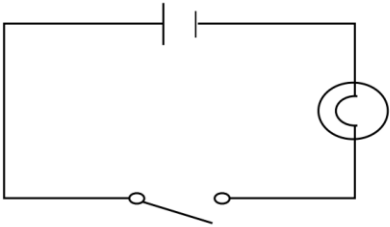
A push-to-break switch

This type of switch breaks the circuit when the button is pressed. In this case, the alarm would sound when an item was lifted off the switch. What kind of alarm would suit this kind of switch?

A push-to-make switch

This type of switch closes the circuit when the button is pressed so the alarm sounds when the button is pressed. This could be used, for example, to detect when someone steps on something. What kind of alarm would suit this kind of switch?

Electrical circuits work by a flow of electricity powering components, such as light bulbs, motors or buzzers. For the components to work, the circuit needs to be closed.



Where would this alarm be used?

What would it be used for?



How many different kinds of alarms can you think of?



Electrical Safety



No water around electricity

Keep drinks and other liquids away from electrical equipment. Make sure your hands are dry.

Don't touch or use damaged equipment

Look carefully at your equipment before you use it. If wires are damaged or batteries are leaking, get an adult!

Don't make short circuits

What are short circuits? If you make a circuit without a bulb, a buzzer or a motor, it can overheat and might catch fire!

See what happens:

