



Topic ELECTRICITY

Year: 6

Strand: Physics

What Should I Already Know?

Main Information

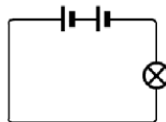
Vocabulary

- Identify common appliances that run on electricity.
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
- Recognise some common conductors and insulators, and associate metals with being good conductors.

Investigate:

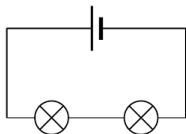
What will make a bulb brighter or a buzzer louder?

- More batteries or a higher voltage create more power to flow through the circuit.
- Shortening the wires means the electrons have less resistance to flow through.

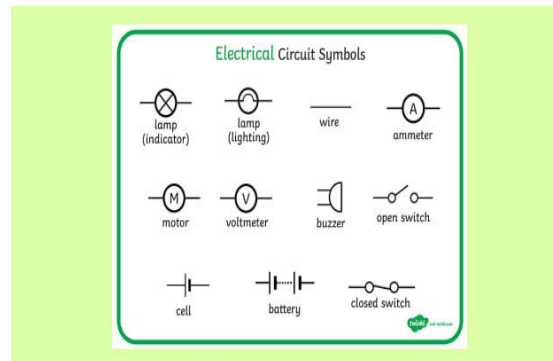


What will make a bulb dimmer or a buzzer quieter?

- Fewer batteries or a lower voltage give less power to the circuit.
- More buzzers or bulbs mean the power is shared by more components.
- Lengthening the wires means the electrons have to travel through more resistance.



- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.



circuit	A path that an electrical current can flow around.
symbol	A visual picture that stands for something else.
cell/battery	A device that stores energy as a chemical until it is needed. A cell is a single unit. A battery is a collection of cells .
current	The flow of electrons , measured in amps .
amps	How electric current is measured.
voltage	The force that makes the electric current move through the wires. The greater the voltage , the more current will flow.
resistance	The difficulty that the electric current has when flowing around a circuit .
electrons	Very small particles that travel around an electrical circuit .

Weston Turville CE School – Science Assessment




Topic:

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Strand:

Question 1: What is the name of a material that allows electricity to pass through?	Start of unit:	End of unit:
insulator		
terminal		
conductor		


Question 5: A mobile phone is operated by electricity. True or False	Start of unit:	End of unit:

Question 9: What is this a symbol for on a circuit diagram?	Start of unit:	End of unit:
		
motor		
battery		
lamp		
buzzer		

Question 2: What unit is electricity measured in?	Start of unit:	End of unit:
amps		
grams		
cms		

Question 6: What are the materials that insulate a mains plug made from?	Start of unit:	End of unit:
wood		
metal		
plastic		
glass		

Question 3: What does a switch do in a circuit?	Start of unit:	End of unit:
provide the electricity		
controls the flow of electricity		
calculate how much electricity is used		

Question 7: What is this the symbol for on a circuit diagram?	Start of unit:	End of unit:
		
motor		
battery		
lamp		
buzzer		

Question 4: Which of the following is an insulator?	Start of unit:	End of unit:
copper		
wool		
aluminium		
silver		

Question 8: What is the correct name for a single battery?	Start of unit:	End of unit:
battery		
circuit		
cell		

Question 10: How could you make a bulb shine brighter in a circuit?	Start of unit:	End of unit:
make the wire longer		
make the wire shorter		
add more cells		
get a new bulb		