



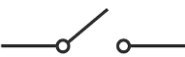

Year 7 Science – Unit Overview

Electricity

Unit Summary

In this topic, students will build on their earlier learning about simple electrical circuits from primary school. They will learn how electricity flows as a current (the movement of electric charge) in both series and parallel circuits. Through practical activities, students will investigate how different materials and components affect the flow of electricity, including the difference between conductors and insulators, while also practising how to record their observations and results clearly in a table.

20 questions to ask or encourage your child to turn them into flashcards.
Answers on the reverse.

1.	Name the circuit component: 
2.	Name the circuit component: 
3.	Name the circuit component: 
4.	Name the circuit component: 

5. Name the component used to measure current
6. What is the unit for current?
7. What is the unit for potential difference / voltage?
8. What is measured in Ohms (Ω)?
9. What type of circuit is formed of only one loop?
10. What type of circuit is formed of more than one loop?
11. What happens to the brightness of a bulb if more cells are added to a circuit?
12. If one bulb stops working in a series circuit, what will happen to the other bulbs?
13. If one bulb stops working in a parallel circuit, what will happen to the other bulbs?
14. What is potential difference / voltage?
15. What electrical component is designed to melt if the current gets too high?
16. What happens to current if resistance is increased?
17. If a circuit is incomplete, what will the reading if an ammeter is connected?
18. What metal, known for its electrical conductivity, is commonly used in wires?
19. What is the function of an ammeter?
20. What are the names and colours of the three wires in a plug?

Further information on this topic:

<https://www.bbc.co.uk/bitesize/articles/zjm8kty>

<https://www.bbc.co.uk/bitesize/topics/zgy39j6>

<https://youtu.be/Lva2yqD8MPI?si=QUoMwRun-Ds-4SW0>

<https://youtu.be/dCx-OVUn7Cw?si=ctQB222Apt6saPn1>

Answers

1. Bulb / filament lamp / lamp / light
2. Cell (accept battery)
3. (open) switch
4. Voltmeter
5. Ammeter
6. Amps (A)
7. Volts (V)
8. Resistance
9. Series circuit
10. Parallel circuit
11. Brightness increases
12. They all stop working / do not turn on
13. Nothing / they all stay working / they all stay on
14. The difference in energy between two points in a circuit per charge
15. Fuse
16. Current decreases
17. 0 A
18. Copper
19. Measure the current
20. Blue = neutral, brown = live, yellow and green = earth