Science

Electricity

WALT: observe and explain the effects of differing voltages in a circuit.

Aim

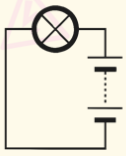
- I can observe and explain the effects of differing voltages in a circuit.

Success Criteria

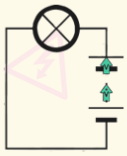
- I can draw circuit diagrams indicating the voltage.
- I can explain the effect of increasing or decreasing the voltage on different parts of a circuit.

Current and Voltage

Current:
This is the steady flow of electrons.
This is measured in amperes (amps)



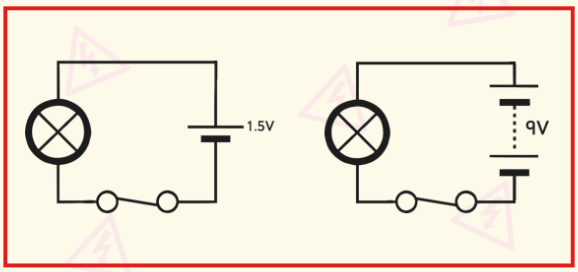
Voltage:
This is the force that makes the electric current flow.
This is measured in volts (V)
The greater the voltage, the more current will flow.



How Many Volts?

Whole Class

Labelling Volts



What Difference Does the Volt Make?

Whole Class

Using your new knowledge of volts, make a prediction. We are going to be adding batteries with a variety of volts to the circuit. What do you think will happen to the bulb's brightness?

	0V	1.5V	3.0V	4.5V
Prediction				
Results				

Key words: dull, bright, extremely bright, completely off, dim

Science

Observing the Effects of Volts

Now, you need to watch the video of Miss Johnson completing the experiment. Fill the results in on the table while you're watching.

Bulb	0V	1.5V	3V	4.5V
Prediction				
Results				
Motor	0V	1.5V	3V	4.5V
Prediction				
Results				
Buzzer	0V	1.5V	3V	4.5V
Prediction				
Results				

Appropriate Volts

What would happen to an electrical appliance that requires 3V if it were powered by 5V cell or battery?