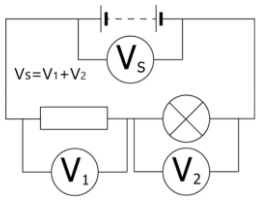
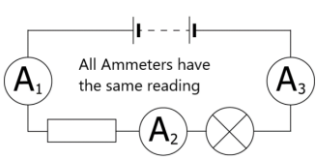
Ohm COmfOrts

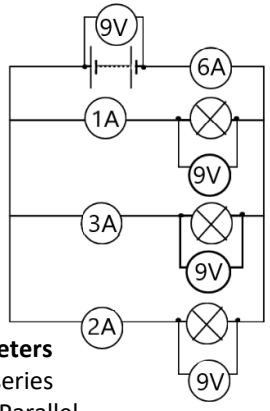
- Wire
- Wires joined
- Wires not joined
- Cell
- Battery
- DC supply
- AC supply
- Fuse
- Earth (Ground)
- Lamp (lighting)
- Lamp (indicator)
- Heater
- Motor
- Bell
- Buzzer
- On-Off Switch
- 2-way Switch
- Resistor
- Variable Resistor
- Voltmeter
- Ammeter
- Ohmmeter
- Oscilloscope

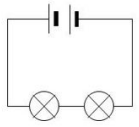
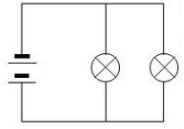
Keyword	Definition
resistance	is a measure of how difficult it is for a current to move through an object
voltage	the electrical push that allows charge to flow
charge	is a physical property of matter that causes it to experience a force when placed in an electromagnetic field.
current	electrons passing through a circuit
Multimeter	a meter to measure many different electrical quantities
Ohmmeter	a meter to measure resistance
Voltmeter	a meter to measure voltage
ammeter	a meter to measure current
circuit	a complete path for the current to follow
potential difference	the difference in the energy of the charge carriers between two points in a circuit
insulator	a material that free electrons can't pass through
conductor	a material that free electrons can pass through
the effects of a current	heat, light, magnetism and chemical effects
continuity tester	A circuit to test whether something is a conductor or an insulator, or to find faults in circuits
parallel circuit	a circuit with more than one path for the current to follow
series circuit	a circuit with only one path for the current to follow

Some particles carry an electric charge. In electric wires these particles are called electrons. An electric current is a flow of charge, and in a wire this will be a flow of electrons.
For an electric current to flow we need:
- Something to transfer the energy to the electrons, such as a cell, battery or power pack.
- A complete path for the electrons to flow through (a complete circuit

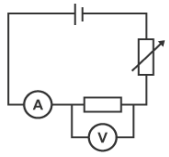


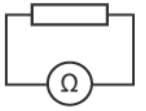


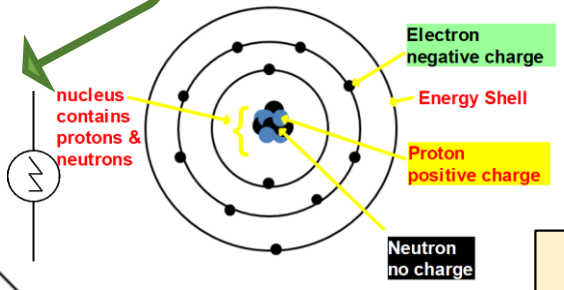


Series	Parallel
$I_s = I_1 = I_2...$ $V_s = V_1 + V_2...$	$I_s = I_1 + I_2...$ $V_s = V_1 = V_2...$
	

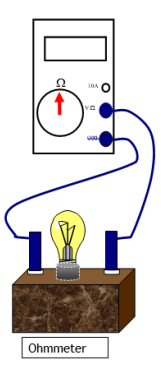
Connecting meters
Ammeters -> series
Voltmeters -> Parallel
Ohmmeters -> no power supply

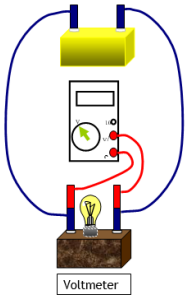


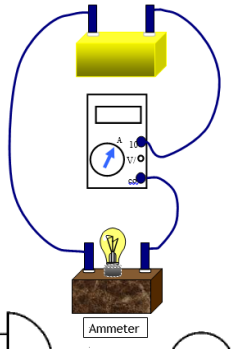




Quantity	Symbol	Unit	Unit symbol
Voltage	V	Volt	V
Current	I	ampere	A
Resistance	R	ohm	Ω







Topic of Electricity