



Key terms Make sure you can write definitions for these key terms.

Delocalised electrons, convectional current, electrons, series, parallel, ammeter, voltage, potential difference, voltmeter, charge, coulomb, resistance, ohms, variable resistor, light-dependent resistor (LDR), thermistor, diode, national grid, alternating current,

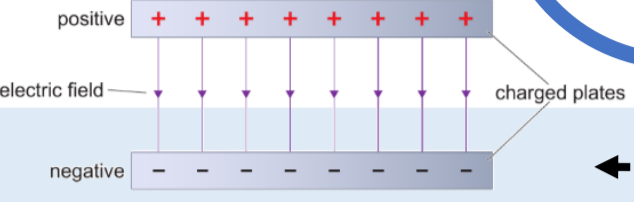
Revision
Retrieval, keyword definitions and equation practice.



Final assessment
★
Review of learning

Apply:
SP13 Electromagnetic induction / the national grid
SP14 Energy calculations
16+ Current/voltage characteristics
Kirchhoff's first/second law
Mean drift velocity
Resistance and resistivity
Circuits and the potential divider
Electromotive force and internal resistance
Conductors, insulators and semi-conductors

Electric fields
What do the field lines tell you about an electric field?

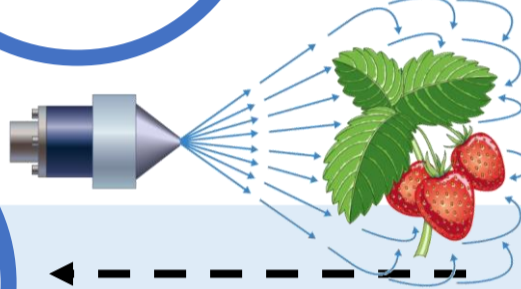


Dangers and uses of static electricity
How does earthing / insecticide sprayers work?

Charges and static electricity
How can an insulator become charged using friction?

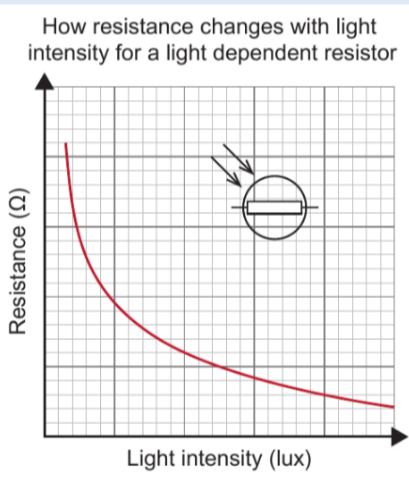
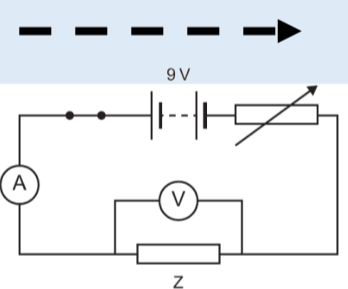
Electrical safety
How do earth wires and fuses makes circuits safer?

Transferring energy by electricity
What is the difference between direct and alternating, for both current and voltage?

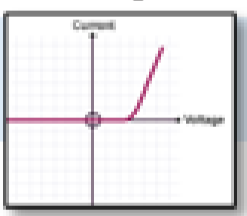


Power
How can you calculate power when you know current, potential difference and/or resistance?

Transferring energy
How can the energy transfer that causes the heating effect be explained



Investigating resistance
CORE PRACTICAL – Investigate the relationship between potential difference, current and resistance for a resistor and a filament lamp



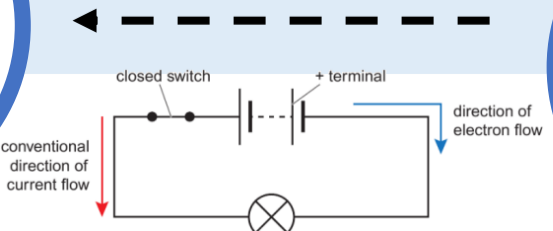
More about resistance
How does light intensity and temperature affect resistance in LDRs and thermistors?

Resistance
What is the connection between voltage, current and resistance?

Current, charge and energy
What is the connection between the electric current and the amount of charge that flows in a circuit?

LESSON 1

Current and potential difference
What happens to the electric current at a junction in the circuit?



Electric circuits
How does the structure of atoms affect the flow of electric current?

Retrieve:
KS2 Simple circuits (Cell, lamp, switches)
P1.1.3 Friction
P1.2.3 Waves / Sound trace waves /oscilloscope P2.1 Electricity and magnetism
P2.2.2 Energy adds up
P2.2.4 Energy transfers: particles
P2.2.7 Energy and power
SP1 Scalar and vectors
SP3 Energy stores and transfers
SP3 Insulators
SP4 Describing waves
SP6 Atomic models / electron orbits
SP8 Power

