PHYSICS: CP9 Electricity and Circuits

CHURCH STRETTON SCHOOL

Assessment = ★

Revision

Retrieval, keyword definitions and equation practice.

SCAN ME

Final assessment

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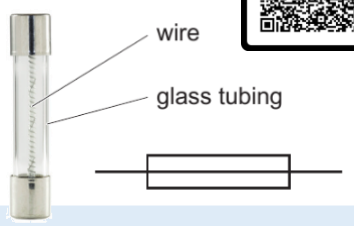
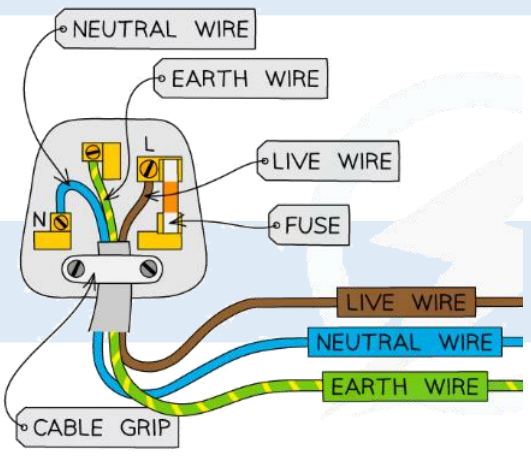
Review of learning

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



Electrical safety

How do earth wires and fuses makes circuits safer?



Transferring energy by electricity

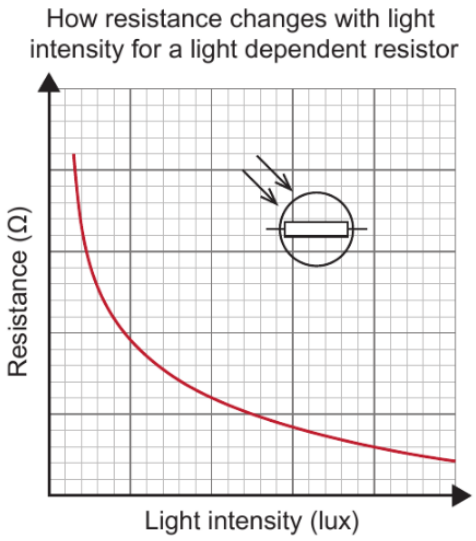
What is the difference between direct and alternating, for both current and voltage?

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

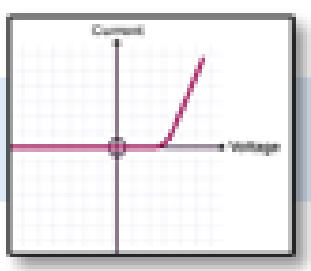


Investigating resistance

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?

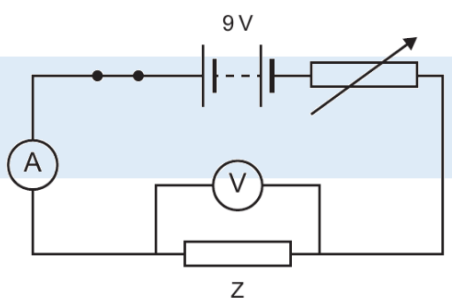


Resistance

What is the connection between voltage, current and resistance?

Current and potential difference

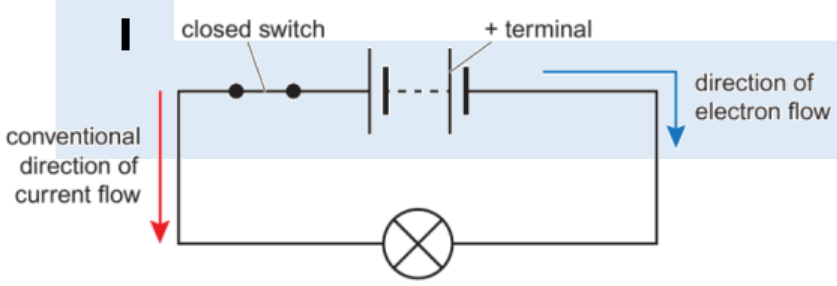
What happens to the electric current at a junction in the circuit?



Current, charge and energy

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

LESSON 1



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

Key terms

Make sure you can write definitions for these key terms.

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