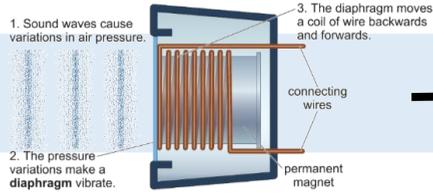


permanent magnet, induced magnet, magnet field, bar magnet, plotting compasses, Earth's magnetic fields, electromagnetism, solenoid, electromagnet, motor effect, magnetic flux density, Tesla, potential difference, generator, dynamo, alternator, alternating current

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



SCAN ME



Final assessment



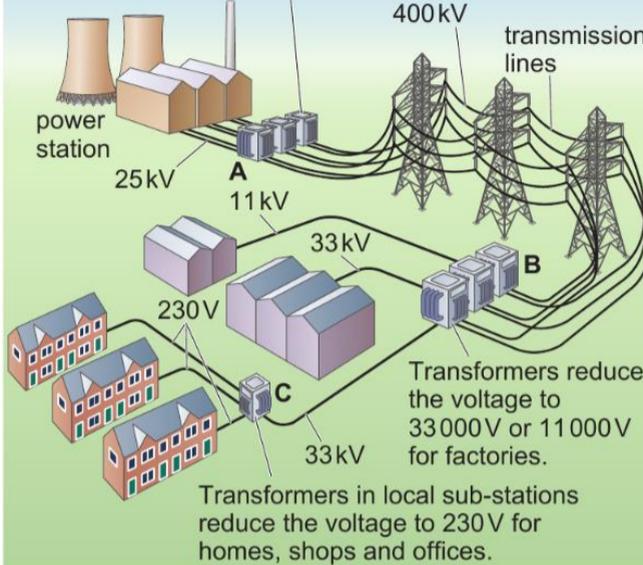
Review of learning

Apply:
16+ Mean drift velocity
Motion of free particles in magnetic fields
Magnetic flux linkage
Faraday's law
Lenz's law
AC generators
Applications for transformers

Revision

Retrieval, keyword definitions and equation practice.

Transformers increase the voltage to 400000V to reduce the amount of energy wasted by heating in the transmission lines.

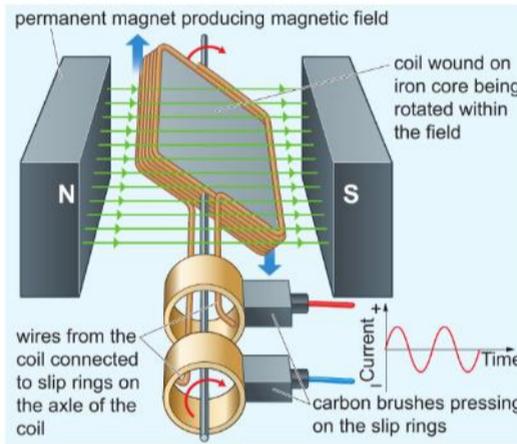


Transformers and energy

How is the law of conservation of energy applied to transformers?

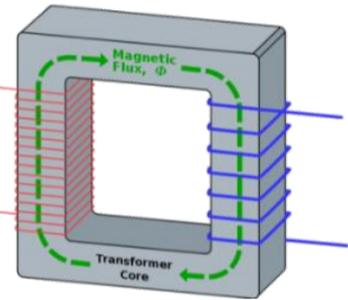
The national grid [H]

How can you calculate the size of the voltage produce by a transformer?



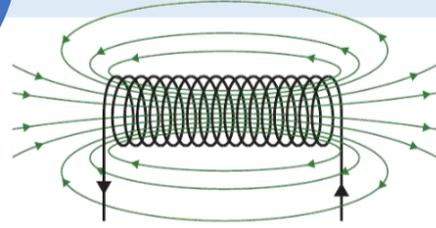
Electromagnetic induction [H]

How can you produce an electric current using a magnet and conductor?



Magnetic forces [H]

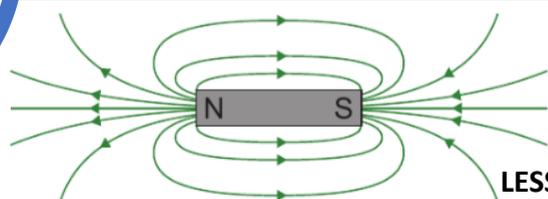
How can electricity and magnetism combined to produce forces?



A solenoid is a coil of wire with current running through it

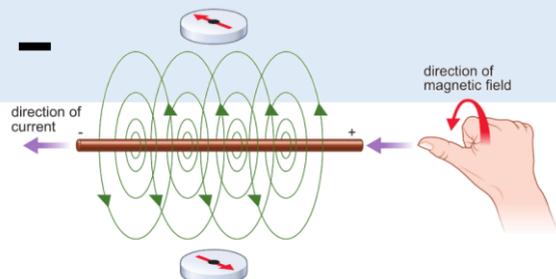
Electromagnetism

What factors affect the strength of the magnetic fields around a wire?



Magnets and magnetic fields

What shape are magnetic fields and how can they be plotted?



Retrieve:
KS2 Simple circuits (Cell, lamp, switches)
P1 Forces (Forces at a distance)
P2.1 Electricity and magnetism
P2.2 Energy transfer: particles
SP1 scalar and vectors
SP3 Conservation of energy
SP6 Atomic models
SP9 Objects affecting each other
SP10 Electricity and circuits