



Learning Journey Map

Year 10 – Physics Combined



OCR
Oxford Cambridge and RSA

Move on to Year 11

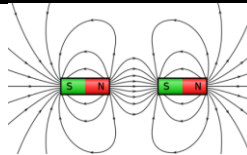


Year 10 Survival Top Tips	
Tip 1	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
Tip 2	Use 'Youtube- e.g. myGCSEscience, freesciencelessons to help review key skills and concepts
Tip 3	Use GCSE Bitesize/Kerboodle resources/past OCR questions
Tip 4	Use the Pixl Resources on Firefly & therapy questions
Tip 5	Read online science news, watch science documentaries

P3 Electricity and magnetism:

P3.3 Magnets and magnetic fields

- Magnets and magnetic field
- Currents and fields
- Currents and forces (Higher tier only)
- Motors (Higher tier only)

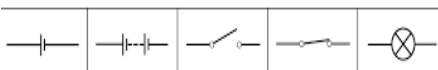
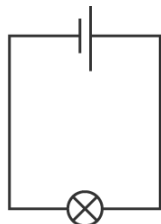


YEAR 10

P3 Electricity and magnetism:

P3.2 Simple circuits

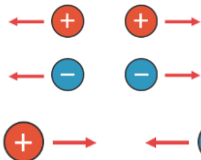
- Circuits and potential difference
- PAG – Circuit components
- Series and parallel circuits
- PAG – Series and parallel circuits
- Resistance
- Graphs of p.d. and current
- LDRs and thermistors
- Net resistance and circuit calculations
- Sensing circuits
- Electrical power



P3 Electricity and magnetism:

P3.1 Static and charge

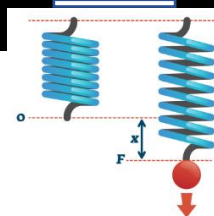
- Electrostatics
- Electric current



P2 Forces:

P2.3 Forces in action

- Stretching springs
- PAG – Hooke's law
- Stretching materials and storing energy
- Gravitational field and potential energy



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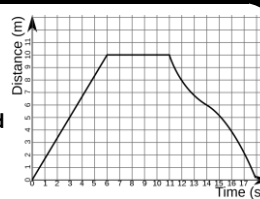
P2.2 Newton's laws

- Forces and interactions
- Free body diagrams
- Newton's First Law
- Newton's Second Law
- Everyday forces and their effects
- Momentum
- Work and power

P2 Force:

P2.1 Motion

- Distance, time and speed
- Vectors and scalars
- Acceleration
- PAG – Motion
- Distance-time and Velocity-time graph
- Equation of motion and kinetic energy

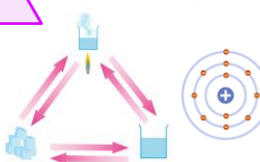
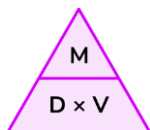


YEAR 10

P1 Matter:

P1.2 Changes of state

- Density
- Energy and temperature
- Specific heat capacity
- PAG – Specific heat capacity
- Specific latent heat
- Gas pressure and temperature



Review of prior knowledge

P1 Matter:

P1.1 The particle model

- The model of the atom
- History of discovering atom



YEAR 10

CURRICULUM OVERVIEW

Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, as well as analysing & evaluating results

Possible careers

Materials scientist, physiotherapist, mechanical engineer, architect, ship designer, theme park ride designer, civil engineer, optician, photographer, Electrical engineer, electrician and many more!!

CURRICULUM OVERVIEW