



Learning Journey Map

Year 10 – Physics Separates



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

P4 Magnetism and magnetic fields:



P4.1 Magnets and magnetic fields

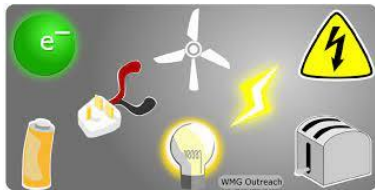
- Magnets and magnetic fields
- Currents and fields

P4 Magnetism and magnetic fields:


P4.2 Uses of magnetism

- Currents and forces
- Motors
- Electromagnetic induction
- Generators
- Transformers
- Microphones and loudspeakers




- P3 Electricity: (P3.2 Simple circuits)**
- Circuits and potential difference
 - Series and parallel circuits
 - Circuits components PAG
 - Resistance; Graphs of p.d. and current
 - Series and parallel circuits PAG
 - LDRs and thermistors
 - Net resistance and circuit calculations
 - Sensing circuits; Electrical power

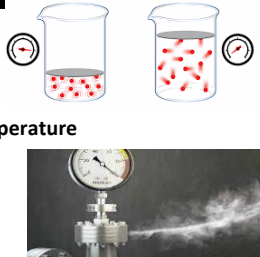
- P3 Electricity:**
- P3.1 Static and charge**
- Electrostatics
 - Electric current
- 


- P2 Forces:**
- P2.2 Newton's Laws**
- Forces and interactions
 - Forces PAG
 - Free body diagrams
 - Newton's First Law and Second law
 - Everyday forces and their effects
 - Momentum
 - Work and power



- P2 Forces:**
- P2.3 Forces in action**
- Stretching springs
 - Materials PAG
 - Stretching materials and storing energy
 - Gravitational field and potential energy
 - Turning forces
 - Simple machines
 - Hydraulics
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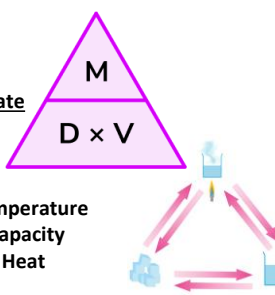


- P1 Matter:**
- P1.3 Pressure**
- Gas pressure and temperature
 - Pressure and volume
 - Atmospheric pressure
 - Liquid pressure
 - Floating and sinking
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- P2 Forces:**
- P2.1 Motion**
- Distance, time and speed
 - Vectors and scalars
 - Acceleration
 - Distance-time graphs
 - Velocity-time graphs
 - Equations of motion and kinetic energy
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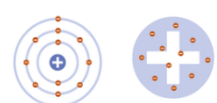
- P1 Matter:**
- P1.2 Changes of state**
- Density
 - Density PAG
 - Energy and temperature
 - Specific Heat Capacity
 - Specific Latent Heat

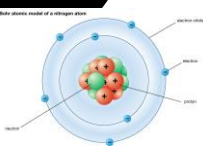


- LIQUID DENSITY**
- Olive Oil
 - Vegetable Oil
 - Wine
 - Colored Water
 - Dish Soap
 - Maple Syrup
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Review of prior knowledge

P1 Matter:

- P1.1 The Particle Model**
- The model of an atom
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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

Research scientist, materials scientist, seismologist, mechanical engineer, architect, ship designer, theme park ride designer, audiologist, optician, photographer, Electrical engineer, civil engineer and many more!!

CURRICULUM OVERVIEW