



Physics Combined Year 9

KS3
Curriculum Details

Modules	Content	Homework	Parent / Carer Support
P3 Energy resources	P3.1 Energy demands P3.2 Energy from wind and water P3.3 Power from the Sun and the Earth P3.4 Energy and the environment P3.5 Big energy issues	The students are given a homework book, either higher tier or foundation tier based on their Kimberley School Target. The students will be allocated pages to complete in this book for homework, which correspond to the lessons taught in class. In addition, questions may be set covering the following areas:	Help them revise using revision cards. Help them revise from the classwork books.
P1 Conservation and dissipation of energy	P1.1 Changes in energy stores P1.2 Conservation of energy P1.3 Energy and work P1.4 Gravitational energy stores P1.5 Kinetic energy and elastic energy stores P1.6 Energy dissipation P1.7 Energy and efficiency P1.8 Electrical appliances P1.9 Energy and power	· Long answer questions. · Practical write-ups. · Revision & flashcards. · Key words.	Ensure they complete homework on time. Encourage them to ask their teachers for help if they are stuck.
P2 Energy transfer by heating	P2.1 Energy transfer P2.4 Specific heat capacity – Required Practical Activity P2.5 Heating and insulating buildings		
P6 Molecules and matter	P6.1 Density – Required Practical Activity P6.2 States of matter P6.3 Changes of state P6.4 Internal energy P6.5 Specific latent heat P6.6 Gas pressure and temperature		

Exam Board: AQA



Physics Combined Year 10

KS4 Curriculum Details

Modules	Content	Homework	Parent / Carer Support
P4 Electric circuits	P4.1 Current and charge P4.2 Potential difference and resistance – Required Practical Activity P4.3 Component characteristics – Required Practical Activity P4.4 Series circuits P4.5 Parallel circuits	The students are given a homework book, either higher tier or foundation tier based on their Kimberley School Target. The students will be allocated pages to complete in this book for homework, which correspond to the lessons taught in class.	Help them revise using revision cards. Help them revise from the classwork books.
P5 Electricity in the home	P5.1 Alternating current P5.2 Cables and plugs P5.3 Electrical power and potential difference P5.4 Electrical currents and energy transfer P5.5 Appliances and efficiency	The questions involve: <ul style="list-style-type: none">• Key word tasks• Calculations• Recall of facts• Description of processes• Explanations	Ensure they complete homework on time. Encourage them to ask their teachers for help if they are stuck
P7 Radioactivity	P7.1 Atoms and radiation P7.2 The discovery of the nucleus P7.3 Changes in the nucleus P7.4 More about alpha, beta, and gamma radiation P7.5 Activity and half-life		
P8 Forces in balance	P8.1 Vectors and Scalars P8.2 Forces between objects P8.3 Resultant forces P8.4 Centre of mass		
P9 Motion	P9.1 Speed and distance-time graphs P9.2 Velocity and acceleration P9.3 More about velocity-time graphs P9.4 Analysing motion graphs		



Physics Combined

KS4

Curriculum Details

Year 11

Modules	Content	Homework	Parent / Carer Support
P10 Force and motion	P10.1 Force and acceleration – Required Practical Activity P10.2 Weight and terminal velocity P10.3 Forces and braking P10.4 Momentum (higher tier only) P10.5 Forces and elasticity – Required Practical Activity	The students are given a homework book, either higher tier or foundation tier based on their Kimberley School Target. The students will be allocated pages to complete in this book for homework, which correspond to the lessons taught in class.	Help them revise using revision cards. Help them revise from the classwork books.
P11 Wave properties	P12.1 The nature of waves P12.2 Properties of waves P12.3 Reflection and refraction (higher tier only) P12.4 More about waves – Required Practical Activity	The questions involve: <ul style="list-style-type: none"> • Key word tasks • Calculations • Recall of facts • Description of processes • Explanations 	Ensure they complete homework on time. Encourage them to ask their teachers for help if they are stuck
P12 Electromagnetic waves	P13.1 The electromagnetic spectrum P13.2 Light, infrared, microwaves and radio waves – Required Practical Activity P13.3 Reflection and refraction P13.4 Ultraviolet, X-rays, gamma rays P13.5 X-rays in medicine		
P13 Electromagnetism	P15.1 Magnetic fields P15.2 Magnetic fields of electric currents P15.3 The motor effect (higher tier only)		

Study Guides Available:

CGP Study and Question books (will last until the end of Y9) - Purchase via sQuid and collect from the science department.

CGP workbook, exam practice question and answers books. These books cover the whole course (Y10 and Y11) - Purchase on-line (£14) through sQuid, and can be collected from Mr Murray in S9.

AQA Physics for GCSE Combined Science: Trilogy. Higher/Foundation Workbook provided by free the Science Department for use in class or at home.

BBC Bitesize Key Stage 3 - www.bbc.co.uk/bitesize

<http://www.expertguidance.co.uk>

Extra parental support

- Ensuring students complete homework on time.
- Encouraging them to seek help if they are struggling.
- Supporting students to revise for end of chapter tests.
- Helping students to review tests to see where to improve and set targets to ensure progress.