



DRAYTON MANOR HIGH SCHOOL

Success at Sixth Form – Subject Specific Tips

Subject	Physics	
Class and homework expectations		
Students should bring the following items to each lesson:		
<ul style="list-style-type: none"> • equipment/stationery (scientific calculator, black/blue pen, green pen, highlighters, ruler, pencil, paper, textbook) • Daily folder containing - <ul style="list-style-type: none"> – formulae and data booklet – personal learning checklists – all the class work, homework and notes for the units that they are currently working on with each teacher 		
Scheme of Work		
Year 12	<ul style="list-style-type: none"> • Measurements and their Errors • Particles • Quantum Phenomena • Radiation • Waves • Mechanics • Materials • Electricity 	Year 13
	<ul style="list-style-type: none"> • Further mechanics • Fields and their effects • Nuclear physics • Radioactivity • Thermal physics • Option unit – Turning points in physics 	
Assessment Objectives		
AO1 – Knowledge & Understanding Candidates should be able to: <ul style="list-style-type: none"> • Recognise, recall and show understanding of knowledge science • Select organise and communicate relevant information in a variety of forms 	AO2 – Application of knowledge & understanding Candidates should be able to: <ul style="list-style-type: none"> • Analyse and evaluate processes • Apply knowledge and processes in unfamiliar situations • Assess the validity, reliability and credibility of scientific information 	AO3 – How Science Works Candidates should be able to: <ul style="list-style-type: none"> • Demonstrate and describe ethical, safe and skilful practical techniques & processes, selecting appropriate and qualitative and quantitative methods • Make, record and communicate reliable and valid observations with appropriate precision and accuracy • Analyse, interpret explain and evaluate the methodology, results and impact of their own and other’s experimental and investigative activities in a variety of ways

Assessment

Year 12 (UCAS Examinations, Year 12 Summer Term):

- Paper 1 – 50% of the overall grade – 70 marks split over 6 or 7 structured questions including calculations, and one extended response question on all topics
- Paper 2 - 50% of the overall grade – 20 marks on practical skills and data analysis, 20 marks on any topic as structured short and long questions, and 30 multiple choice questions on all topics.

Year 13 (A-level examinations, Year 13 Summer Term):

- Paper 1 – 34% of overall A Level grade – 25 multiple choice questions & 60 marks on structured questions including calculations, and extended response questions on year 12 topics and further mechanics
- Paper 2 – 34% of overall A Level grade – 25 multiple choice questions & 60 marks on structured questions including calculations and extended response questions on year 13 topics (except further mechanics)
- Paper 3 – 32% of overall A Level grade – 45 marks on practical and data analysis skills and 30 marks on structured questions including calculations and extended response questions on option unit

Practical Endorsement – students will carry out 12 core practical activities during the two-year course, which will be written-up in a lab book and internally assessed. This will appear as a pass or fail on their A Level certificate.

In addition to the summative assessments listed above, students will take end of topic and progress tests at regular intervals.

How to do well in the subject at A Level

- Attend all lessons and catch-up any work missed
- Keep folder organised and up to date
- Respond to the feedback provided by your teacher (feedback tasks and tests)
- Spend a minimum of 5 hours per week studying physics. The time should be spent on:
 - Completing homework (on time)
 - Learning all key terms and definitions (use flashcards)
 - Practising key mathematical skills regularly
 - Practising past examination questions
 - Using Seneca learning, textbooks and websites to support your studies
- Keeping Personal Learning Checklists up to date and using them to inform revision

Support available

- Analysis of the January mock examinations will identify areas that require improvement – teachers will provide specific support materials/plan lessons to support the development of these areas
- Exam questions and model answers will be provided regularly
- Students should see their teacher for help if needed

How parents can help support

- Please help your son or daughter to organise their folder and keep it up to date
- Check that they are doing homework and studying independently as described above
- Discuss with them any letters that you receive about their progress

Helpful websites or resources

www.aqa.org.uk

www.phet.coloradu.edu

www.antonine-education.co.uk

Revision guides can be purchased from Student Reception