



Subject	Year	Term
Physics	11	1
Topic		
Forces		
Content (Intent)		
Prior Learning (Topic)	Electricity	
Unit 5: Forces		
Students will learn in depth the concept of vectors and scalars and their purpose in understanding interactions between objects through contact or non-contact means. Newton’s laws of motion will be studied in greater detail whereby students will complete a required investigation into Newton’s 2 nd law. A further study of Hooke’s law and learning about the graphical representation will be completed. Students will also learn about moments, gears, levers and atmospheric pressure.		
Future Learning (Topic)		
Electromagnetism		
What Knowledge and Skills will be taught (Implementation)		How will your understanding be assessed & recorded (Impact)
Knowledge - Forces <ul style="list-style-type: none">The difference between scalars and vectors followed resultant forces and their connection to accelerationNewton’s three laws of motion, inertia mass and equations of motion undergoing uniform acceleration and conservation of momentumThe concept of momentum and detailed conservation of momentum - calculationsPlastic deformation of materials, using experimentation to take accurate and precise measurements.Moment and pressure calculations.		Key Piece of work (Homework) Pupils given a percentage and formative feedback provided. End of topic test Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. Walking talking Mocks (WTM) Formative feedback provided. Year 11 Mock Exam Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.
Maths Skills <ul style="list-style-type: none">Applying new formula in familiar and unfamiliar contexts.The application of collected data into graphs and for analysis.		
Practical Skills <ul style="list-style-type: none">Reading measuring equipment with accuracy and precision, taking repeats, following methods.		
Interleaving Topic: Unit 3: The Particle Model – Relates to intermolecular forces and gas pressures.		
How can parents help at home?		
Ensure all class booklets are complete and homework submitted on time		
Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.		
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.		
Ensure all pupils have all their resources required for science lessons, including Knowledge organisers, pens and calculators		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading		Vocabulary Lists:
AQA revision guides		Momentum
AQA revision cards		Conservation of momentum
EDUCAKE online learning platform.		Plastic Deformation
GCSE POD		Resultant force
BHHS Knowledge organisers		Crumple Zones
		Terminal Velocity
		Strain Energy
		Moments