

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6	
<p style="text-align: center;">Year 11 Physics & Combined Science Physics</p>	<p>Content delivered: Unit 5 Forces Scalar and vectors Contact and non-contact forces Gravity and Resultant forces Forces and elasticity Moments, levers and gears (Physics only) Pressure in fluids (Physics only) Atmospheric pressure (Physics only) Motion Acceleration Newtons laws Stopping distances Reaction times</p>	<p>Content delivered: Unit 5 Forces: Momentum Conservation and changes in momentum Unit 6 Waves: Transverse and longitudinal waves Properties of waves Sound waves (Physics only) Waves for detection and exploration (Physics only)</p>	<p>Content delivered: Unit 6 Waves: Electromagnetic waves Properties of electromagnetic waves Uses and applications of electromagnetic waves Lenses (Physics only) Visible light (Physics only) Emission and absorption of infrared radiation (Physics only) Black body radiation (Physics only)</p>	<p>Content delivered: Unit 7 Magnetism and electromagnetism: Poles of a magnet Magnetic fields Electromagnetism Flemings left hand rule Electric motors The generator effect (Physics only) Induced potential (Physics only) Transformers (Physics only) Unit 8 Space physics (Physics only): Solar system Life cycle of a star Orbits Red shift</p>	<p>Content delivered: Unit 1 content review and exam prep Unit 2 content review and exam prep Unit 3 content review and exam prep Unit 4 content review and exam prep Unit 5 content review and exam prep Unit 6 content review and exam prep Unit 7 content review and exam prep Unit 8 content review and exam prep</p>	<h1>Summer exams</h1>	
	<p>Key Words Level 2 Level 3</p>	Scalar, vector, contact, non-contact, balanced, unbalanced, resultant, newton, gravity, weight, work done, elasticity, moment, lever, gear, pressure, fluid, distance, displacement, speed, velocity, acceleration, stopping/braking/thinking distance, momentum	Transverse wave, longitudinal wave, compression, rarefaction, progression, displacement, particle, peak, crest, trough, wavelength, frequency, amplitude, lambda, hertz, period of wave.	Transverse wave, longitudinal wave, compression, rarefaction, progression, displacement, particle, peak, crest, trough, wavelength, frequency, amplitude, lambda, hertz, period of wave.	Pole, field lines, force lines, flux lines, neutral point, test magnet, lodestone, dipole, plotting compass, field strength, iron filings, planetary Nebula, protostar, supernova, White Dwarf, Red Super Giant		Taken from all units
	<p>Where previous knowledge has occurred and future development KS2 → KS3 → KS4 → KS5</p>	KS2: Forces as pushes and pulls KS3: Year 8 – levers and pulleys KS3: Year 9 – Contact and non-contact forces KS4: Year 11 – Parallelogram of forces KS5: Moments and equilibrium	KS2: Investigating how things move KS3: Year 8 - radiation KS3: Year 9 – Sound waves KS4 Year 10 – Electromagnetic spectrum KS5: Resonance	KS2: Investigating how things move KS3: Year 8 - radiation KS3: Year 9 – Sound waves KS4 Year 10 - Electromagnetic spectrum KS5: Resonance	KS2: Forces as pushes and pulls KS3: Year 8 - Electromagnets KS4: Y10 - Electricity KS5: Electromagnetic induction		KS2: All relevant content KS3: All relevant content KS4: All taught units from Y10 & Y11 KS5: Used in all units
	<p>Common Misconceptions</p>	Force arrows	The medium moves along with the wave.	Not all objects emit IR radiation.	Direction of flux lines – arrows point towards north pole.		Identified and addressed from mock exams
	<p>Literacy</p>	Scientific writing (HSW): Stopping distances NHTW reviews as starter activities	Scientific writing (HSW): Waves NHTW reviews as starter activities	Scientific writing (HSW): Lenses Writing to describe: the applications f EM waves NHTW reviews as starter activities	Scientific writing (HSW): Magnetism Writing to describe: Uses of electromagnets NHTW reviews as starter activities		NHTW reviews as starter activities
	<p>Numeracy</p>	Drawing and interpreting graphs Rearranging equations	Drawing and interpreting graphs Rearranging equations	Drawing and interpreting graphs Rearranging equations	Standard form		Graphs skills Calculating means Rearrangin equations
	<p>Homework</p>	Completion of kerboodle/Seneca/carousel section quizzes	Completion of kerboodle/Seneca/carousel section quizzes	Completion of kerboodle/Seneca/carousel section quizzes	Completion of kerboodle/Seneca/carousel section quizzes		Completion of kerboodle/Seneca/carousel section quizzes
	<p>Assessment this half-term</p>	Unit 5 test with questions from units 1-4 included	Mock exam – paper 1 & 2	Mock exam – paper 2			Exam style questions
	<p>Career opportunities Employment Links</p>	LIFE SKILLS: Understanding the factors that affect stopping distances EMPLOYMENT: Crash investigator	LIFE SKILLS: Understanding how different types of instruments make a sound EMPLOYMENT: Musician	LIFE SKILLS: Understanding how lenses work EMPLOYMENT: Royal Navy - sonar	LIFE SKILLS: Understanding how to use a compass EMPLOYMENT: Geophysicist		LIFE SKILLS: Resilience and organisation EMPLOYMENT: You can do anything with science!
	<p>Enrichment</p>			Physics Olympiad			
<p>Practical activities/HSW</p>	Forces and elasticity Investigating stopping distances	Properties of waves Reflection of waves	Lenses	Magnetism	RP reviews		
<p>Employability Skills</p>	Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Staying positive		