

Week		Theoretical	Applied		Exploring		Advancing
8/9	Practical Skills	Introduction lesson 1	Introduction lesson 2	Mechanics	8.1.1 - Specific heat capacity	Thermal	Review FM test summer corrections
		0.1.1 and 0.1.2 How are practical skills assessed and SI units	4.1.1 - Scalars and vectors		8.1.2 and 8.1.3 - Specific latent heat and tricky thermal transfer problems		11.1.1 - Magnetic flux density
15/9		Induction test	4.1.2 - Forces in equilibrium		8.2.1 - Absolute zero and kelvin temperature scale 8.2.2 - Pressure law 8.2.3 - Boyles law 8.2.4 - Charles' law		11.1.2 - Forces on charged particles
		0.1.3 and 0.1.4 – Experiment design and Micrometres and callipers	4.1.3 - Moments		8.2.2 - Pressure law 8.2.3 - Boyles law 8.2.4 - Charles' law		11.1.3 - Electromagnetic induction
22/9		0.1.5 – Data and tables	4.1.4 - Centre of mass and moments		8.2.5 - Molar mass an Avogadro's constant 8.2.6 - The ideal gas equation 8.2.7 - Work done on a gas		11.1.4 - Faraday's law and Lenz's law
		0.1.6 and 0.1.7 – Drawing manipulating straight line graphs	4.1.5 - Problems with two pivots		8.3.1 - Intro to kinetic theory 8.3.2 and 8.3.3 - Deriving and using the kinetic theory equation		11.1.5 - Alternating current
29/9		0.1.8 – Sources of error and uncertainty	4.2.1 - Uniform acceleration		8.3.4 - Calculating the energy of a gas		11.1.6 - Transformers
		0.1.9 – Calculating uncertainties	Mechanics Interim test		Revision		Required practical 10
6/10		0.1.10 – Evaluating and concluding	4.2.2 - Displacement time graphs		Revision		Practice practical questions lesson
		Practical skills revision lesson	4.2.3 - Velocity time graphs		Thermal test		Revision
13/10		Practicals test	4.2.4 - Acceleration time graphs		Required practical 8A		Revision
	Waves	3.1.1 - Transverse and longitudinal	4.2.5 - Newton's laws of motion		Required practical 8B		Magnets Test
20/10		3.1.2 - Polarisation of waves	4.2.6 - Acceleration due to gravity		Practice practical questions lesson		Required practical 11
PR1		3.1.3 - Wave speed	4.3.1 - Projectile motion		Test feedback		Practice practical questions lesson
	Half term break						

3/11	Waves	3.3.1 - Refractive index	Mechanics	4.3.2 - Drag lift and terminal speed	Gravitational Fields	9.1.1 and 9.1.2 Intro to gravitational fields and Gravitational force	Nuclear	12.1.1 - Measuring nuclear radius
		3.3.2 - Critical angle and TIR		Required practical 3		9.1.3 - Gravitational field strength		12.1.3 - Properties of nuclear radiation
10/11		Waves Interim test		4.3.3 - Conservation of momentum		9.1.4 - Gravitational potential part 1		12.1.4 - Background radiation and intensity
		3.1.4 - Superposition and stationary waves		4.3.4 - Force, momentum, and impulse		9.1.5 - Gravitational potential part 2		12.2.1 - Exponential law of decay
17/11		3.1.5 - Investigating resonance		4.3.5 - Work and power		9.1.6 - Satellite orbits		12.2.2 - Half-life and its applications
PR day + wellbeing day		-		-		9.1.7 - Orbital equations		12.2.3 - Nuclear decay
24/11		Required practical 1A		4.3.6 – Conservation of energy		G-fields and circular motion interim assessment		12.3.1 - Mass defect and binding energy
		Required practical 1B		Mechanics revision lesson		9.2.1 and 9.2.2 - Intro to electric fields and Electric force		12.3.2 - Nuclear fission and fusion
1/12		3.2.1 – Diffraction		Mechanics revision lesson		9.2.3 - Electric field strength		12.3.3 - Nuclear fission reactors
		3.2.2 – Two source interference		Mechanics test		9.2.4 - Charged particles fired into a uniform field		Revision
8/12		3.2.3 – Diffraction gratings	Materials	5.1.1 - Density	Electric Fields	9.2.5 - Electric potential part 1		Nuclear assessment
		Required practical 2A		5.1.2 - Hooke's law		9.2.6 - Electric potential part 2		Required practical 12
15/12		Required practical 2B		5.1.3 – Elastic potential energy		9.2.7 - Comparing electric and gravitational fields		Practice practical questions lesson
PR2		slack		slack		slack		slack

	Christmas break											
5/1	Mid year exam revision	Materials	5.1.4 - Stress and strain		Revision		Astrophysics	13.1.1 - Lenses				
			5.1.5 - Youngs modulus		Fields Test			13.1.2 - Optical telescopes				
12/1	Mid year exam revision		5.1.6 - Brittle materials	Capacitors	10.1.1 - Capacitors		Astrophysics	13.1.3 - Comparing telescopes				
			Mid year exam revision		10.1.2 - Energy stored by capacitors			13.1.4 - Non-optical telescopes				
19/1	Mid-year exam		Mid-year exam		10.1.3 - Dielectrics		Astrophysics	13.1.5 - Parallax and parsecs				
			Mid-year exam		10.1.4 - Charging and discharging			13.2.1 - Magnitude				
26/1	Quantum	Circuits	6.1.1 - Circuit basics		10.1.5 - Time constant and time to halve		Astrophysics	13.2.2 - Stars as blackbodies				
			6.1.2 - Current, voltage and resistance in series		6.1.3 - Current, voltage and resistance in parallel			Revision				
2/2			Review of Mid-year		Revision			Revision				
			6.1.4 – Solving tricky circuit combinations		Revision			Revision				
9/2			6.2.1 – IV characteristics		Mock exams			Mock exams				
	Quantum interim task											
	Half term break											
23/2	Particles	Circuits	6.2.2 – Resistivity and superconductors	Capacitors	Required practical 9A		Astrophysics	13.2.3 - Stellar spectral classes				
			Required practical 5		RP follow up			13.2.4 - Hertzsprung-Russell diagram				
2/3			6.2.3 - Power and electrical energy		Mock exam feedback			13.2.5 - Evolution of sun like stars				
			6.2.4 - EMF and internal resistance		Required practical 9B			13.3.1 - Supernovae and Neutron stars				
9/3			Required practical 6		RP follow up			13.3.2 - Black holes and quasars				
			6.2.5 - Potential dividers		Revision			13.3.3 - The doppler effect and red shift				
16/3			Electricity revision lesson		Revision			13.3.4 - The big bang theory				
			Electricity revision lesson		Revision			13.3.5 - Detection of binary stars and exoplanets				
23/3			Circuits test		Revision			Revision				
			slack		Revision			Astro test				
	Easter Break											
13/4	Further Mechanics	Further Mechanics	7.1.1 and 7.1.2 – Radians and angular speed		Mock exam paper 2			Mock exam paper 2				
			7.1.3 and 7.1.4 – Centripetal force and acceleration		Revision			Revision				
20/4		slack	slack		Revision			Revision				
		slack	slack		Revision			Revision				
27/4		Transfer revision	Transfer revision		Mock exam paper 3			Mock exam paper 3				
		Transfer revision	Transfer revision		Revision			Revision				
4/5		Transfer revision	Transfer revision		Revision			Revision				
		Transfer revision	Transfer revision		Revision			Revision				
11/5		Transfer exams	Transfer exams									
		Transfer exams	Transfer exams									
18/5		Transfer exams	Transfer exams									
		Transfer exams	Transfer exams									

	May Half term					
1/6		WEX		WEX		
		WEX		WEX		
8/6	FM: SHM	SHM recap	FM: Circular motion	Circular motion recap		
		7.2.4 – Simple harmonic oscillators		7.1.5 – Motion in a vertical circle		
15/6		7.2.5 and 7.2.6 – Free and force vibrations and damping intro		7.1.6 – Circular motion at an angle		
		Required practical 7A		Required practical 7B		
22/6 FoS		Practice practical questions lesson		Practice practical questions lesson		
29/6		Further mechanics revision		Further mechanics revision		
		Further mechanics revision		Further mechanics test		
6/7		Glider project		Glider project		
		Glider project		Glider project		