Long term Plan Subject: Physics YEAR 12

Term	Topic(s)	Assessed work	Additional details
1 a 7 weeks 28 lessons	Foundations in Physics • Implementing • Analysis • Quantities and Units • Measurements Materials • Springs • Mechanical Properties of Matter Work, Energy, and Power • Work and conservation of energy • Kinetic and Potential Energies • Power Forces and Motion • Kinematics • Linear Motion	Maths for Physicists test (w/b 20.9.21) PAG 1.1 PAG 2.1	
1b 7 weeks 28 lessons	Newton's Laws • Newton's Laws of Motion • Collisions Forces and Motion • Linear Motion • Projectile Motion Forces in Action • Density and Pressure • Dynamics • Motion with Non-Uniform Acceleration • Equilibrium	Mini-Test (w/b 1.11.21) PAG 3.1 PAG 3.2	
2a 7 weeks 28 lessons	Charge and current • Charge • Mean Drift Velocity Energy, Power, and Resistance • Circuit Symbols • EMF and PD • Resistance • Resistivity • Power Waves • Wave Motion • EM Waves	Forces and Motion Test (w/b 3.1.22) PAG 4.1 PAG 5.1 PAG 5.2 PAG 5.3	

	• Superposition • Stationary Waves		
2b 5 weeks 20 lessons	Electrical Circuits • Series and Parallel Circuits • Internal Resistance • Potential Dividers	Easter Test (w/b 4.4.22) PAG 6.1	
3a 5 weeks 20 lessons	Quantum Physics • Photons • The Photoelectric Effect • Wave Particle Duality	13th June -Exam Week	
3b 7 weeks 28 lessons	Particle and Medical Physics • Using X-Rays • Diagnostic Methods • Using Ultrasound Newtonian world • Circular Motion Research Project	PAG 12	