Long term Plan Subject: YEAR 10

Term	Topic(s)	Assessed work	Additional details
1 a 7 weeks 14 lessons	1: Key Concepts • What is Physics? • Big and Small 3: Conservation of energy • Conservation of energy • Kinetic Energy • Gravitational Potential Energy • Dissipation of energy • Efficiency • Home Insulation • Thermal Conductivity • Non-Renewable Resources • Renewable Resources	Topic 3 End of Unit test (w/b 18.10.21)	
1b 7 weeks 14 lessons	6: Radioactivity • Structure of the Atom • Development of the Atomic Model • Energy Levels • Background Radiation • Radioactivity • Ionisation • Nuclear Equations • Half-Life • Uses of Radioactivity • Dangers of Radioactivity • Medical Uses of Radioactivity • Fission and Fusion • Nuclear Power	Topic 6 End of Unit test (w/b 3.1.22)	
2a 7 weeks 14 lessons	2: Forces and Motion • Scalars and Vectors • Measuring Speed • Distance-Time Graphs • Acceleration • Speed-Time Graphs • Equations of Motion • Representing Forces • Newton's First Law • Mass and Weight • Circular Motion (Higher only) • Newton's Second Law • Core Practical – F=ma • Newton's Third Law		

2b 5 weeks 10 lessons	2: Forces and Motion (continued) • Momentum (Higher only) • Collisions (Higher only) • Stopping Distances • Crash Hazards 8: Forces doing Work • Work • Power	Topic 2 End of Unit test (w/b21.3.22)	
3a 5 weeks 10 lessons	9: forces and their Effects • Newton's Laws • Vector Diagrams • Moments • Gears	13th June -Exam week 20th/27th June-work experience Topic 8/9 End of Unit test (w/b 9.5.22)	
3b 7 weeks 14 lessons	11: Static Electricity • Static Electricity • Uses of Static Electricity • Dangers of Static Electricity • Electric Fields 10: Electricity • What is a Circuit • Series and Parallel • Electric Current • Potential Difference		