

## SCHEME OF WORK YEAR 2

Week	Major	Minor	Assessment
L6 Enrolment			
12-Sep	<b>3.6.1.2 Simple Harmonic Motion</b> Oscillations, SHM, Sinusoidal functions	Boyle's law, Charles' law, Pressure law	Yr 2 induction test for Bm5 (online)
19-Sep	<b>3.6.1.3 Simple Harmonic Systems</b> Mass – spring system, Simple pendulum, Energy in SHM	The ideal gas equation	
26-Sep	<b>3.6.1.4 Forced Vibrations and Resonance</b> Forced oscillations, Resonance.	Kinetic theory of an ideal gas.	BM5 Test
03-Oct	SHM Problem Solving	Gases Problem Solving	
10-Oct	<b>3.7.2 Gravitational Fields</b> Gravitational fields; Field strength, Field patterns	<b>3.8.1 Radioactivity</b> The discovery of the nucleus, Properties of radiation, Inverse square law,	Benchmark 5
17-Oct	Gravitational potential, Newton's law of gravitation - the force between masses	Decay equations, N - Z curves, Radioactive series, Safety aspects,	
Half Term			
31-Oct	Planetary fields, Satellites	Radioactive decay law, Activity,	
07-Nov	Gravitational fields Problem Solving	Half-life, Decay constant, Applications.	
14-Nov	<b>3.7.3 Electric Fields</b> Electrostatic phenomena, Coulomb's law – the force between point charges,	<b>3.8.1 Nuclear Energy</b> Energy and mass,	
21-Nov	radial fields. Field patterns, Electric field strength,	Mass defect, Binding energy, Nuclear stability,	BM6 Test
28-Nov	Uniform Fields Electric potential, Equipotentials,	Fission, Fusion,	
05-Dec	Comparison between electric and gravitational fields	the thermal nuclear reactor.	Benchmark 6
12-Dec	Electric fields Problem Solving	Nuclear Problem Solving	Student Review 3 Available
Christmas Holidays			
02-Jan	<b>3.7.4 Capacitance</b> Capacitance, Capacitors, Parallel plate capacitor,	Option topic Week 1	
09-Jan	Energy stored in a charged capacitor,	Option topic Week 2	

16-Jan	Charging and discharging a capacitor.	Option topic Week 3	
23-Jan	<b>3.7.5 Magnetic Fields</b> Permanent magnets; Field lines, flux density; $F = Bil$	Option topic Week 4	<b>Mini Online Test</b>
30-Jan	Force on moving charges,	Option topic Week 5	
06-Feb	Applications – the cyclotron and mass spectrometer	Option topic Week 6 & test	
<i>Half Term</i>			
20-Feb	<b>MOCK EXAMS</b>		
27-Feb	Test analysis and practice	Test analysis and practice	
06-Mar	Magnetic flux, Flux linkage, Electromagnetic induction,	MCQ technique	
13-Mar	Faraday's and Lenz's laws,	MCQ technique	
20-Mar	AC generator, Transformers	Long Answer Technique	<b>Benchmark 7</b>
27-Mar	Paper 3 DA Practice	Long Answer Technique	<b>Student Review 4 Available</b>
<i>Easter Holiday</i>			
17-Apr	Revision Planning	Option Topic Revision	
24-Apr	Topic in a lesson Revision	Option Topic Revision	
01-May	Topic in a lesson Revision	Topic in a lesson Revision	
08-May	<b>Last Day of U6 Teaching - Friday 14<sup>th</sup> May</b>		