






YEAR 10 CURRICULUM INFORMATION – Physics

	Summer 1	Summer 2
What will students be learning?	<p><u>Forces and Motion</u></p> <ul style="list-style-type: none"> • Forces and Elasticity • Required Practical: Relationship between force and extension of a spring • Revision 	<p><u>Wave Properties</u></p> <ul style="list-style-type: none"> • Sound Waves (HT) • The Uses of Ultrasound (HT) • Seismic Waves (HT) <p><u>End of Year Exam</u></p>
How will students be assessed?	<ol style="list-style-type: none"> 1. Milestone test at the end of the topic 2. In-class formative review each lesson 3. Required Practical Assessment 	<ol style="list-style-type: none"> 1. Milestone test at the end of the topic 2. In-class formative review each lesson 3. End of Year Examination
Literacy – What keywords will be taught?	Force, extension, original length, elastic, plastic, deformation, permanent, temporary, elastic potential energy, parallax error, elastic limit, Hooke’s Law	Longitudinal, medium, velocity, wave speed, displacement, amplitude, frequency, Hertz, time period, oscilloscope, division, ultrasound, sonar, echolocation, echo, seismic, primary wave, secondary wave, long wave, intensity, epicentre, focus.
What employability skills are being developed?	<ul style="list-style-type: none"> • Teamwork (undertaking of elasticity practical where accuracy of results depends significantly on attention to detail, following instructions precisely and correct interpretation of observed measurements using analogue devices) 	<ul style="list-style-type: none"> • Interpretation of waveforms, useful in professions including: sound engineering, musicians, stage design, audiologist, seismologist, geophysicist, sonar operator, astrophysicist, volcanologist and healthcare
Wider Curriculum Links?	<ul style="list-style-type: none"> • PE – links to ball games with correct pressure in balls to ensure right levels of compression occur and result in optimal bounce. • Maths – discussion of proportionality and how to determine this from graphical data 	<ul style="list-style-type: none"> • Music – Interpretation of sounds heard by audience • Biology – Links to prior learning about the ear and how it functions with audible tones

<p>What useful websites are there for this topic?</p> <p>Click links for more info</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Free Science Lessons</p> </div> <div style="text-align: center;">  <p>Primrose Kitten</p> </div> <div style="text-align: center;">  <p>GCSE Pod</p> </div> <div style="text-align: center;">  <p>BBC Bitesize</p> </div> <div style="text-align: center;">  <p>Oak National Academy <i>Select KS4 Science (Triple)</i></p> </div> </div>
<p>What wider reading could be done for this topic?</p> <p>Click links for more info</p>	<p>Textbook (separate sciences): AQA GCSE Physics Student Book (3rd Ed)</p> <p>Textbook (combined science): AQA GCSE Physics for Combined Science (Trilogy) Student Book (3rd Ed)</p> <p>Revision Guide (separate sciences): AQA GCSE 9-1 Physics All-in-One Complete Revision and Practice (available on ParentPay)</p> <p>Revision Guide (combined science): AQA GCSE 9-1 Combined Science Higher All-in-One Complete Revision and Practice (available on ParentPay)</p>
<p>What else can students be doing independently to develop their understanding of this topic?</p> <p>Click links for more info</p>	<p>Exam Question Practice (matches the revision guides on ParentPay): Collins AQA GCSE 9-1 Physics Workbook</p> <p>Exam Question Practice (Separate Higher Tier): CGP GCSE Physics AQA Exam Practice Workbook - Higher</p> <p>Exam Question Practice (Combined Higher Tier): CGP GCSE Combined Science AQA Exam Practice Workbook – Higher</p> <p>Exam Question Practice (Separate Foundation Tier): CGP GCSE Physics AQA Exam Practice Workbook - Foundation</p> <p>Exam Question Practice (Combined Foundation Tier): CGP GCSE Combined Science AQA Exam Practice Workbook - Foundation</p>