

Subject	Year 9 Physics Content Autumn Term	How to support students' learning
Wave Properties	<p>Summary of Concepts Covered:</p> <ul style="list-style-type: none"> <li>➤ Properties of waves.</li> <li>➤ Features of transverse and longitudinal waves.</li> <li>➤ Wave Practical's – Required for GCSE (Measuring the speed of waves in a ripple tank and solid)</li> <li>➤ Reflection and refraction of waves</li> </ul>	<p>Students can review the work covered using their revision guide or using the BBC Website: <a href="#">Types of waves - Properties of waves - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a></p> <p>Completing practical tasks in science is important as these can be accessed during their examinations in year 11. Watch these videos to remind yourself of the practical task you have completed in lesson: <a href="#">Wavespeed - GCSE Science Required Practical - YouTube</a></p> <p>Apply your knowledge and calculate the wave speed of a water wave: <a href="#">Waves Intro (colorado.edu)</a> You will need the measuring tape and stop clock.</p> <p>Reflection and refraction is a fundamental aspect of light. It happens all the time. Use the animation to play with the concepts: <a href="#">Bending Light - Snell's Law   Refraction   Reflection - PhET Interactive Simulations (colorado.edu)</a></p>
Electromagnetic Waves	<p>Summary of Concepts Covered:</p> <ul style="list-style-type: none"> <li>➤ The electromagnetic spectrum</li> <li>➤ Radio waves and electrical circuits.</li> <li>➤ How electromagnetic waves are generated.</li> <li>➤ The effects of gamma, X-rays and ultraviolet radiation on the body.</li> <li>➤ Uses of electromagnetic waves.</li> <li>➤ Infrared Radiation – Required Practical</li> </ul>	<p>Review your knowledge of electromagnetic waves using the video here: <a href="https://www.youtube.com/watch?v=7v2gs8rdQzU">https://www.youtube.com/watch?v=7v2gs8rdQzU</a></p> <p>Make sure you know your uses, review the uses on the BBC bitesize website: <a href="#">Uses of electromagnetic radiation - The electromagnetic (EM) spectrum - GCSE Physics (Single Science) Revision - BBC Bitesize</a></p> <p>There is another required practical about waves, but this time its about heat (infrared radiation): <a href="#">Required practical - how different surfaces affect infrared intensity - Infrared radiation absorption and radiation by a surface - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a></p>