| Subject | Physics | | |
|---|---|---|---|
| | **Interpretation of National Curriculum into Year group Endpoints** | | |
| **Year** | **Term 1** | **Term 2** | **Term 3** |
| **11** | Students will desribe and explain the concepts of:<br>**P5 Forces**<br>• forces and fields: electrostatic<br>**P6 Waves**<br>• amplitude, wavelength, frequency, relating velocity to frequency and wavelength<br>• transverse and longitudinal waves<br>• electromagnetic waves, velocity in vacuum; waves transferring energy; wavelengths and frequencies from radio to gamma-rays<br>• velocities differing between media: absorption, reflection, refraction effects<br>• production and detection, by electrical circuits, or by changes in atoms and nuclei<br>• uses in the radio, microwave, infra-red, visible, ultra-violet, X-ray and gamma ray regions, hazardous effects on bodily tissues.<br>**P7 Magnetism and electromagnetism**<br>• exploring the magnetic fields of permanent and induced magnets, and the Earth's magnetic field, using a compass<br>• magnetic effects of currents, how solenoids enhance the effect<br>• how transformers are used in the national grid and the reasons for their use<br>**P8 Space physics**<br>• the main features of the solar system<br>• life cycle of stars<br>• orbital motion, natural and artificial satellites<br>• red shift | Students will complete PPEs, review these papers and then follow a strucutred revision program of all 8 units of study that make up GCSE Physics. | Students will take the two exams which make up the assessment for GCSE Physics. |