QPHS Year 11 Physics Curriculum Map

Half term	Title	Unit summary	Assessment
1	P5 Forces	• Forces; scalar and vector quantities, contact, gravity, resultant forces, work done, elasticity and moments. • Motion; distance, displacement, speed, velocity, acceleration and momentum. • Newton's laws of motion and forces and braking	• Required practical – investigate the relationship between force and extension for a spring. • End of topic test with cumulative content from year 10 physics. • Required practical – investigate the effect of varying force and mass on acceleration. • Mid-point topic test with cumulative content from year 10 physics. • End of topic test with cumulative content from year 10 and 11 physics.
2	P6 Waves	• Properties of transverse and longitudinal waves • Properties and uses of electromagnetic waves • Lenses, visible light and black body radiation	• Required practical – making observations to measure the frequency, wavelength and speed of a wave. • Required practical – investigate the reflection of light by different types of surfaces and the refraction of light by different substances. • Required practical – investigating the amount of radiation absorbed and radiated by a surface. • End of topic test with cumulative content from year 10 and 11 physics.
3	P7 Magnets and electromagnets	• Poles of a magnet and magnetic fields • The motor effect; electromagnetism, Fleming's left-hand rule, electric motors and loudspeakers. • Induced potential, transformers and the National Grid	• End of topic test with cumulative content from year 10 and 11 physics.
4	P8 Space	• Our solar system and stars • Orbital motion, natural and artificial satellites • Red-shift	• End of topic test with cumulative content from year 11 physics.
5	Revision		