Subject: **KS4 Physics**		Year Group: **11**
Term 1 Key Focus/Topic(s) **Force and Do Work** • Work and Power • 2D resultant force calculations • Hooke's Law	Term 2 Key Focus/Topic(s) **Heat Capacity and Gas Laws** • Specific heat capacity • Kinetic theory • Gas laws.	Term 3 Key Focus/Topic(s) **Electric and Magnetic Fields** • Electrostatics (if not covered in Year 10) • Electric and magnetic fields • Electromagnet induction
Term 1 Assessment Opportunities: • Classwork with a particular focus on extended open response questions (exam preparation).	Term 2 Assessment Opportunities: • Classwork with a particular focus on extended open response questions (exam preparation). • Specific Heat Capacity investigation (core practical investigations).	Term 3 Assessment Opportunities: • Classwork with a particular focus on extended open response questions (exam prep). • Mock Exams
Term 4 Key Focus/Topic(s) **Astronomy** • Lens • Life cycle of stars • Red Shift • Origins of the universe	Term 5 Key Focus/Topic(s) **Revision** • Knowledge. • Numeracy skills. • Literacy skills.	Term 6 Assessment Opportunities N/A
Term 4 Assessment Opportunities: • Classwork with a particular focus on extended open response questions (exam preparation).	Term 5 Assessment Opportunities: • Revision	Term 6 Assessment Opportunities: N/A

Rationale:

All of the topics covered in Year 11 (like the Year 10 material) require higher levels of abstract thinking from students. More so than in Year 10, some of the material requires students to put multiply concepts and formula together to solve problems. For example specific heat capacity and specific latent heat problems require students to consider thermal energy in relation to temperature changes as well as fusion and vaporization.

In Year 11 Physics we place a particular focus on:

- Literacy skills – in preparation for 6 mark exam style questions, students are required to respond to various styles of questions – explain, describe, plan/devise, comment on, compare and contrast.
- Mathematical skills in Physics – applying different concepts and ideas to solve multi-step problems, using data to support their scientific conclusions.
- Practical Skills – understanding the scientific method, processing and presenting data, forming conclusions.

Evaluation:

- Assessment opportunities will involve teacher, self and peer assessment. The assessment will focus around work produced in lessons where the students are required to demonstrate their literacy and/or numeracy skills as well as their scientific knowledge.
- Students should demonstrate good mathematical skills in Physics – solving multi-step problems.
- Assessment of students extended writing answers – students should demonstrate that they can identify command words; context or/and instructions; key terminology in the questions. In response to unpicking the questions students should be able to make responses that are detailed, explaining the science and use the correct scientific terminology.
- Book scrutiny, lesson observations and collegial discussions will be used to quality assure teaching and learning. Gap analysis on mock papers.