Year 11 Physics Curriculum Overview - Term 3

Welcome to the Year 11 Physics curriculum overview. This term, both Combined and Triple Science students will focus on revision to prepare for their upcoming Physics GCSE exams. The revision will include topic reviews, exam practice, and a focus on required practicals.

Topic Overviews

Students will revise the key topics covered throughout the Physics course:

- 1. **Energy**: Energy transfers, conservation of energy, and energy efficiency.
- 2. **Electricity**: Current, voltage, resistance, and circuits.
- 3. **Particle Model of Matter**: The states of matter, changes in state, and the internal energy of substances.
- 4. **Atomic Structure**: The structure of atoms, radioactivity, and nuclear radiation.
- 5. Forces: Motion, forces, work done, momentum, and Newton's laws.
- 6. **Waves**: Properties of waves, sound waves, and the electromagnetic spectrum.

For **Triple Science only**, additional topics include more advanced content on **Electricity** (e.g., circuits in series and parallel), **Nuclear Physics**, and **Further Forces**.

Exam Practice and Techniques

- **Practice Questions**: Students will practice answering a variety of exam questions, including multiple-choice, short answer, and extended response questions.
- **Time Management**: Guidance on managing time during exams and allocating appropriate time to each section.
- **Command Words**: Students will learn how to approach different types of questions (e.g., "explain," "describe," "evaluate").
- **Past Papers**: Reviewing past GCSE papers to familiarize students with the exam format and question style.

Reviewing the Required Practicals

Students will revise the key required practicals from the course, including:

- **Energy**: Investigating the specific heat capacity of a substance.
- **Electricity**: Investigating Ohm's law and the relationship between current, voltage, and resistance.
- Forces: Investigating the relationship between force and extension for springs.
- Waves: Investigating the speed of sound and measuring wave properties.

Students will practice analyzing data from these experiments and understand how to present their findings.

This term is focused on ensuring all students are well-prepared for their upcoming Physics GCSE exams, with strong support in both content and exam techniques.