# PCHS Curriculum Information - Year 10

| **Course Title: GCSE Physics** | **Exam Board: AQA Specification Code: 8463** |
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**How will students be assessed?**

In GCSE Physics, students will sit two external exams at the end of Year 11. Each paper is worth 50% of their final GCSE grade. Exams will be 1 hour and 45 minutes in length requiring students to answer structured, closed short answer and open response questions. Questions will be knowledge based as well as drawing on the practical work that students have completed throughout the course.

**Physics GCSE Paper 1**: This will assess the topic areas of energy, electricity, the particle model of matter and atomic structure.

**Physics GCSE Paper 2**: This will assess the topic areas of forces, waves, magnetism and electromagnetism, space physics as well as some of the work previously done on energy and electricity.

| **KEY CONTENT** | |
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| **Half Term 1**<br><u>PHY2 Electricity</u><br>● Domestic Electricity<br>● Static Electricity and Electric Fields<br><br><u>PHY3 Particle model of matter</u><br>● Density<br>● Changes of state<br>● Particle model of gases<br>● Pressure in gases | **Half Term 4**<br><u>PHY5 Forces</u><br>● Gears and Lever<br>● Pressure<br>● Motion Graphs<br>● Accelerated Motion<br>● Newton's Law |
| **Half Term 2**<br><u>PHY3 Particle model of matter</u><br>● Internal energy<br>● Specific heat capacity<br>● Specific latent heat<br><br><u>PHY4 Atomic Structure (Radioactivity)</u><br>● Atomic Structure<br>● Ions & Isotopes<br>● Models of the Atom | **Half Term 5**<br><u>PHY5 Forces</u><br>● Terminal Velocity<br>● Forces and braking<br>● Momentum (HT) |

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| • Nuclear Radiation<br>• Nuclear Decay Equations<br>• Half-Life<br>• Contamination<br>• Background Radiation | |
| **Half Term 3**<br><u>PHY4 Atomic Structure (Radioactivity)</u><br>• Radioactive Hazards and Half-Life<br>• Medical Uses of Radiation<br>• Nuclear Fission<br>• Nuclear Fusion<br><br><u>PHY5 Forces</u><br>• Vectors & Scalars<br>• Resultant Forces<br>• Work Done<br>• Forces and Elasticity<br>• Moments | **Half Term 6**<br><u>Year 10 Exams</u><br>• Revision, assessment and feedback<br><br><u>Revision of Electricity and Energy topics</u> |