A Level Physics

Examination Board:

AQA

Assessment:

The subject is assessed through three final exams taken at the end of two years of study.

Why Study Physics?

A level Physics gives you the opportunity to explore the phenomena of the universe and to look at theories that explain what is observed. This subject combines practical skills with theoretical ideas to develop descriptions of the physical universe. You will learn about everything from kinematics to cosmology and many recent developments in fascinating topics, such as particle physics. If you are interested in the limits of space, the beginning of time and everything in between this is the subject for you. Physics is more than a subject – it trains your brain to think beyond boundaries.

Physics allows you to delve into the laws that explain why everything in the universe – from quasars to Quavers – exists. It explores where energy comes from, how it behaves and how it can be transformed. It also examines the forces of nature – like gravity – and how they work. You'll gain an understanding of how sustained flight works and why satellites don't fall from the sky. Apart from when they do. It's a multi-faceted subject that can lead to a fascinating and fulfilling career, whether your interests lie in theoretical or experimental physics.

Your Future Pathways

Students will develop skills that will enable them to increase Mathematical prowess, think analytically with the ability to write and follow instructions for others; think outside one topic box to draw together

knowledge from all topics to solve problems; tabulate data logically.

What Will I Study?

Year 12

- Particles and radiation
- Waves and optics
- Mechanics and materials
- Electricity
- Skills in AS physics

Year 13

- Further mechanics
- Thermal physics
- Gravitational and electric fields
- Capacitors
- Magnetic fields
- Nuclear physics

Optional units [1 chosen]

- Astrophysics – Students traditionally follow this option but others can be offered
- Medical physics
- Engineering physics
- Turning points in Physics