Physics

Exam board: AQA

Entry requirements:
GCSE Grade 6 or above in Physics or GCSE Combined Science Grade 6-6 or above. If you are taking GCSE Combined Science, you must have scored a grade 6 in the Physics units. However, a Grade 7 or 8 in Physics and a Grade 7 or above in Mathematics is also strongly recommended.

Course content:
AQA Physics gives you the opportunity to study a core of key concepts in greater detail, with many topics from GCSE being revisited in greater detail. Topics include: Particles and Radiation, Waves, Mechanics and Energy, Electricity, Further Mechanics and Thermal Physics, Fields, and Nuclear Physics.

There is also a selection of optional units, one of which must be taken. These include: Astrophysics, Medical Physics, Engineering, Turning Points in Physics, and Electronics. We currently teach Astrophysics as the optional unit, however, if a class has a particular interest in another topic, this can be catered for. There is also a greater emphasis on practical work and developing skills to work as a Physicist.

Assessment:
A2 Level Paper 1 – Units 1-5 and 6.1.
A2 Level Paper 2 – Units 6.2, 7 and 8.
A2 Level Paper 3 – Practical Skills and Option Unit.
You will also undertake a number of Core Practicals throughout the year to gain a separate 'Practical Endorsement'

Why choose Physics:
Choosing A-level Physics will enable you to expand your future options, opening up many pathways post FSG. Choosing to study at FSG, will enable you to answer the big questions raised from your GCSE physics. If you are interested in finding the solutions to some of the world's future problems, then with a strong focus on problem solving skills and practical techniques linked to real world context, you can equip yourself to be a person with outstanding academic and practical skills.

Skills and progression:
Studying physics at FSG will enable you to develop your problem solving, research, and analytical skills. Pupils will develop their resilience and their ability to understand new concepts. You will gain skills enabling you to test out new ideas, plus question and investigate other people's theories. This will be useful for any kind of job that involves research or debate. Future careers are broad, and can range from nuclear physics, astrophysics, engineering, the armed forces and game design.
These skills will also complement other sciences, enabling a higher achievement in other subjects, which can lead to careers such as geophysics or medical physics.