PHYSICS

S3 and S4

During S3 pupils work on overtaking the 3rd and 4th level Curriculum for Excellence outcomes with progression towards either presentation at National 4 or National 5 by the end of S4.

Assessments

Over both S3 and S4 pupils will be assessed through staged internal assessments each lasting 45 minutes focussing on both knowledge and problem solving skills. In S3 pupils will sit a 90 minute S3 exam in March that will cover the course content for S3. In S4, National 5 pupils will sit a prelim in November lasting 2hours along with completing their SQA assignment in January.

How can you support your child?

All assessment dates and homework information will be posted by class teachers on Show My Homework along with revision links and materials- which can be accessed by parents and carers at any time. All course materials, including notes, homeworks and revision materials can be accessed via the Google classrooms setup by the class teacher. In addition the following web links provide general support information.

[BBC Bitesize National 4](https://www.bbc.com/education/subjects/znb39j6)

[BBC Bitesize National 5](https://www.bbc.com/education/subjects/z6fsgk7)

[National Parent Forum for Scotland](https://www.npfs.org.uk/)

The National 4 and 5 courses have three mandatory Units.

*Pupils will study:*

**Electricity and Energy**

In this unit pupils will consider the applications of electricity and energy on our lives, as well as the implications on society/the environment. This unit covers the key areas of generation of electricity, electrical power, electromagnetism, practical electrical and electronic circuits, the gas laws and the kinetic model.

**Waves and Radiation**

In this unit, pupils will consider the applications of waves and radiation on our lives, as well as the implications on society/the environment. This unit covers the key areas of wave characteristics, sound, electromagnetic spectrum and nuclear radiation.

**Dynamics and Space**

In this unit, pupils will consider the applications of dynamics and space on our lives, as well as the implications on society/the environment. This unit covers the key areas of speed and acceleration, relationships between forces, motion and energy, satellites and cosmology.

S5 and S6

Pupil in S5 and S6 study either Higher or Advanced Higher courses that are delivered in a single academic year with prelim examinations taking place in January and February.

**Higher**

This course reinforces and extends the knowledge and understanding of the concepts of physics and related problem solving skills and practical abilities acquired in the National 5 course in S4. The course endeavours to provide learning experiences leading to the acquisition of worthwhile knowledge, skills and attitudes.

Assessment

Pupils will complete staged internal assessments throughout the course and progress will be tracked and communicate to home via Show My Homework. In addition the formal SQA assessments are detailed below with the assignment assessment taking place in December and February.



**Advanced Higher**

Advanced Higher Physics offers to those who have been successful in Higher Physics an opportunity to study topics at a deeper level than was possible in Higher Physics. There is an emphasis on independent study and on taking personal responsibility for learning.

Assessment

Pupils will complete staged internal assessments throughout the course and progress will be tracked and communicate to home via Show My Homework. In addition the formal SQA assessments are detailed below with the project assessment taking place between December and February.

The course assessment will consist of two components: a question paper and a project.

Component 1 — question paper 100 marks (77% of the total mark).

 Section 1 will contain objective questions and will have 20 marks.

Section 2 will contain extended response questions and will have 80 marks.

Component 2 — project 30 marks (23% of the total marks)

The purpose of the project is to allow the learner to carry out an in-depth study of a chemistry topic. The topic will be chosen by the learner, who will individually investigate/research the underlying physics. This is an open-ended task which may involve a significant part of the work being carried out without close supervision.