

## **SCIENCE WITH PHYSICS**

### **Why choose Science with Physics**

Science is all around us and many things we rely on in our everyday modern lives such as energy, transport systems, modern medicine and communications depend on Physics. Through the development of generic transferable skills in science, numeracy, problem solving and practical work, the study of Science with Physics will help you to gain an understanding and appreciation of how things work in our world and how they might work in the future. It will also ensure you are equipped with the skills to prepare you for further study of this or other science subjects.

### **What does the course involve?**

The course covers a range of topics at levels 4 that will extend into N5 Physics preparing you for N5 Physics in S4.

You may have 3 periods every week to continue your Science with Physics studies during which you will:

- Develop knowledge and understanding
- Develop problem solving and higher order thinking skills
- Develop practical and investigative skills through practical work and research.
- Complete report writing tasks and start an N5 assignment project.

You will also start an N5 unit of work on Waves and Radiations that will include:

- Wave Behaviour and Definitions.
- Sound – how fast is it?
- The Electromagnetic Spectrum
- Light – investigating the bending of light (refraction) and its applications.
- Nuclear Radiation.
- Nuclear Fission and Fusion.

### **How is your work assessed?**

You will be assessed in Knowledge & Understanding and Problem Solving throughout the year. You will complete a number of practical experiments and learn how to present these to N5 standard. There will be continual formal assessments and an end of unit assessment that will give indication on how best to proceed in S4.

### **Homework in this course**

Homework will be given frequently and will be based on a wide range of activities. It will provide opportunities for pupils to consolidate their knowledge & understanding and to develop their skills in problem solving, researching and presenting information.

### **Possible pathways in the Senior Phase**

Progression will be dependent on progress and attainment through the level 3 and 4 outcomes and how you have coped with the N4/5 work. Pupils will have the option to continue their Physics studies in the senior phase by choosing:

- S4 - National 4 Physics – success in this course will enable pupils to progress to National 5 in S5 and subsequently Higher in S6
- S4 - National 5 Physics – success in this course will enable pupils to progress to Higher in S5 and subsequently Advanced Higher in S6