

## **Science**

At St John's, Science is a compulsory core subject. As a Science Department our philosophy is to go beyond the compulsory and we try to foster a life-long enjoyment of Science. We like our students to be problem solvers and to regularly undertake investigations.

GCSE begins in Upper 4 (Year 9) with a team of dedicated specialist teachers for each of the subjects: Biology, Chemistry and Physics. The most able are selected, and will be one set, to study for the separate GCSE in Biology, Chemistry and Physics. Other students will take the Double Award Combined Science and they are split into two sets. Generally the separate Science set will comprise 10 – 13 students. The top set for the Double award is similarly 10 – 13 students, whereas for the second set the size is 5 – 8 students.

Upper 3 (Year 7) follow an integrated science course and are not set, they are taught in their mixed ability form groups. Lower 4 (Year 8) are placed into sets and are taught separate Biology, Chemistry and Physics.

Students will have three hours of Science per week in Upper 3 to Upper 4 (Years 7 to 9) and five hours in Lower and Upper 5 (Years 10 and 11).

### **Curriculum Description**

We follow Edexcel (9-1) GCSE Science as follows:

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Combined Science (1SC0)

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Biology (1BI0)

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Chemistry (1CH0)

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Physics (1PH0)

There are two terminal papers each of 1 hour and 45 minutes duration for each single separate GCSE, six papers in total. The Double Award also has two terminal papers for each subject but their duration is 1 hour and 15 minutes, again six papers in total.

We have three specialist rooms: one newly refurbished physics classroom, one newly refurbished chemistry lab and a Biology room with benches. All have projectors, a networked computer and interactive whiteboards, enabling enhanced learning.

### **Homework**

Two homework assignments are set per week: one learning task and one written task. We expect our students to complete all homework to a high standard and to meet deadlines.

### **Opportunities outside of the classroom**

Towards the end of the GCSE Biology course for both the separate Biology and the Biology section of Double Award Combined Science, fieldwork is undertaken at the Hanningfield reservoir. Starting this year an Astronomy club, in order to celebrate the 50<sup>th</sup> anniversary in 2019 of Apollo 11 landing on the moon.