



Dear Parent/Carer,

Firstly, I would like to thank you for the support you have given us in Science in the completion of homework using our new homework platform Sparx Science. We really appreciate the effort pupils have put into completing their homework, as it supports the learning they complete in class and will help them progress in Science and deepen their knowledge of the key scientific concepts they study.

I am writing to you to answer some of the frequently asked questions that we have from parents about Science to allow you to have a greater understanding of what pupils are learning and any support you can give them over their time at Sir Christopher Hatton Academy.

## What does my child learn in Science?

Pupils learn both about the world around them and the techniques they need to investigate the phenomena in the world they live. Pupils learn this in two ways substantive knowledge, which is the knowledge need to understand the worlds of Biology, Chemistry and Physics; and disciplinary knowledge, which is the knowledge needed to plan, investigate and analyse results to make valid conclusions.

In Years 7 and 8 our curriculum in Science is divided into the 4 different disciplines, Biology, Chemistry, Physics and investigation skills. Over the course of these two years pupils build on the foundations they learnt at primary school and develop their knowledge to a deep level of understanding. Then in Years 9 and 10, pupils then develop this key knowledge further and begin to link the knowledge they have learnt together.

In Year 11, pupils will then begin to prepare for their GCSE examinations. This involves using their knowledge they learnt in the previous 4 years and learning how to apply this knowledge to the GCSE exam questions so they can best demonstrate all that they have learnt in Science.

If you would like to find out more about what your child is learning this term, we have the Learning Journeys for each term available on the Academy Website [here](#).

## What exam board does SCHA follow for Science?

At GCSE we follow the Edexcel exam board. This is for both Combined Science and Triple Science. For more information about the specifications, they can be found on [here](#).

## What is the difference between Combined Science and Triple Science?

Combined Science is the qualification most pupils in the UK study. In this qualification the 3 disciplines of science are still taught and examined separately but pupils do not go into as much depth as Triple Science. This qualification is designed to give pupils a good overall knowledge of Science and the skills that they need to investigate and analyse results. Pupils studying combined science will receive a double grade in science to show their average ability across the 3 sciences, for example 5-5 or 5-4.

In Triple Science, pupils learn each of the science disciplines to a greater depth, looking at more complex ideas and phenomena. Pupils who study Triple Science will receive grade for each science individually.

### **Does my child have to study Triple Science to do A Level Science?**

No. A Level sciences can be taken no matter which course was studied at GCSE, all you will need to do for either qualification is getting the required entry requirements of a grade 7 in the Triple Science subject or a Combined Science grade of 7-6.

### **How can my child be selected to study Triple Science in Year 11?**

At the end of Year 10 we complete our Triple Science selection process. This mostly involves looking at the grades from Year 10 tests and Year 10 mock exams to see who would be able to cope with the demands of the Triple Science course we run at SCHA, which involves in Year 11 learning all the additional content alongside reviewing all the content learnt in Year 10. Therefore, if pupils are wanting to be considered for Triple Science pupils need to make sure they get the best grades possible in their Year 10 assessments and mock examinations at the end of the year.

### **What can we do to support at home in our child's progress in Science?**

There are many ways to support pupils at home. The best ways include: -

- Supporting your child in completing their Sparx Science homework, as this helps embed the knowledge they have learnt in class
- In Years 9 to 11, we give you the opportunity to purchase a revision guide for your child at a reduced cost. These revision guides help provide pupils with physical book of revision notes and also an online version of the revision guide, which includes questions and other revision activities to further support their revision. More information about these will be sent soon by Mrs Legassick, the Second in Science.
- Pupils can also use the online revision and learning platforms to help revise and revisit any of the knowledge they have learnt in class. The ones we recommend are:-
  - BBC Bitesize - [GCSE and secondary resources for KS3 and KS4 - BBC Bitesize](#)
  - Seneca Learning - [Free Homework & Revision for A Level, GCSE, KS3 & KS2](#)

### **Are there any extracurricular activities my child can participate in within Science?**

Yes, this year we are happy to announce that we have or will be launching a number of different activities in the science department. The following are currently available: -

- KS3 Science Club – Open to pupils in Years 7-8. The club runs on a Wednesday afternoon 3.15 to 4.10 each week. The focus of the club is to complete experiments that pupils usually cannot do in the classroom to investigate the world around us. If pupils are interested, they need to contact Mrs Legassick
- Year 11 Revision Club – Open to pupils in Year 11 who want to do focused revision each week. The club runs on a Friday lunch time in DC1. If pupils are interested to join, they need to contact Mr Edmonds
- A Level Taster Session – These will be taking place over Term 2 and will allow pupils to get insight into the content and teaching of A Level Sciences at SCHA and more information of these sessions will be sent out to Year 11 at the start of next term

Over the course of this year, we will also be looking to run afterschool lectures, a Girls into STEM campaign, the 2<sup>nd</sup> annual Science Fair, external competitions and many more.

### **What assessments take place throughout the year?**

Over the course of the year there are a number of different assessments that take place, of which there are 3 types of assessments: -

- Formally Marked Work (FMWs) – FMWs are short assessments made of exam questions which have about 20 marks. These assessments test pupils on the most recent topics they have learn to ensure they have understood the main concepts of the topic. These are done within class in test conditions and occur throughout the year within lessons.
- Tests – These are larger assessments that assess all the knowledge that have been taught in that year. These assessments are made from exam questions and are completed within lesson, and are usually 50-60 minutes long. These assessments lead to the progress reports that are sent home and due to this importance, the Key Stage leads in Science will put the revision lists on Classcharts so pupils can fully prepare for these tests. These tests take place at the end of Term 1, Term 3 and in Term 6.
- Mock Exams – These take place at the end of Year 10 and throughout Year 11. These are full examination papers and are taken in the exam hall under full exam conditions. The results of these assessments are given out in GCSE style results events and pupils will be given the grades they would have achieved. These exams are very important and help determine both the Tier that pupils will be entered for and are also used at the end of Year 10 in our Triple Science selection process.

### **How are pupils set in Science?**

Within Science pupils are set so they have appropriate support and challenge in lessons. At Key Stage 3 this setting is completed alongside the Maths and English departments to ensure that

pupils are in an appropriate set across all their core subjects, as they will be in the same set for these 3 subjects.

At Key Stage 4, pupils are then set dependent on the tier and qualification they are aiming to be entered into for their GCSEs. In Year 10, these sets are made dependent on what their achievements in their end of Year 9 exams were and pupils are placed into sets with pupils with similar abilities so they can be supported and challenged at the correct level. Within Year 11, we have one set of Triple Sciences and then the other sets are set similar to Year 10. Within Year 10 and 11, we look to have flexibility within the sets so the sets are reviewed after the Term 3 and 5 assessments in Year 10 and the Mock exams in December in Year 11. This helps ensure the correct pupils are on the correct tiers and receiving the right amount of challenge for them to Flourish in Science.

### **How do I know how well my child is progressing in Science?**

There are many ways that we let you know how pupils are doing in science. Firstly, you will receive a report in terms 2, 4 and 6; which inform you about the current progress in science as well as their attitude in lessons and how they are doing in their homework. These give you a good understanding of how pupils are progressing after key assessment windows throughout the year. Secondly, you will have the opportunity to discuss progress during Parents Evening, which will allow you to have an appointment with your child's science teacher to discuss their progress and how they can be further supported to help them be as successful as possible. Finally, you can always contact your child's Science teacher via Edulink or email if you need to get an update or raise a concern.

I hope this information has helped and if you have any further questions about the information please contact your child's Science Teacher.

Kind Regards

**Josh Edmonds**  
**Head of Science**