



**GCSE Sciences**

**Introduction and course overview**

GCSE Science allows all pupils to explore their curiosity of the world around them through experimentation, analysis of data and application of interesting scientific ideas. Through studying GCSE science, pupils have access to a wide range of high paying, in-demand and impactful careers. Opportunities in scientific fields can be found all over the world, expanding pupils' horizons. Science is an excellent subject for pupils who really enjoy explaining why things happen and how technology works. If they would like to take Science A-levels, T-levels or apprenticeships, or just want to spend more time learning amazing scientific ideas and completing additional experiments, then Triple Science is a brilliant option.

The choice that pupils have when choosing their options is whether to take Combined Science as a core subject or choose Triple Science as one of their options. The differences between these two routes are outlined below.

Qualification	Combined Science (core subject)	Triple Sciences (option to be chosen)
Suitability	Suitable for all pupils.	Suitable for pupils who have a strong interest in science and high achievement in Key Stage 3.
Timetable Time	9 lessons per two-weeks.	15 lessons per two-weeks.
GCSE Qualification	A single qualification, but equivalent to 2 GCSEs. Grades range from 1-1 (equivalent to two grade 1s in other GCSE subjects) to 9-9 (equivalent to two grade 9s in other GCSE subjects).	Three separate GCSE qualifications: <ul style="list-style-type: none"> <li>• Triple Biology</li> <li>• Triple Chemistry</li> <li>• Triple Physics</li> </ul> Grades range from 1 to 9 and different grades can be awarded in each qualification.
Topics Covered	Pupils spend equal amounts of time learning biology, chemistry and physics. There are more physics topics but they are shorter than those in biology and chemistry. <ul style="list-style-type: none"> <li>• 9 Biology topics, including health, cells and ecosystems</li> <li>• 8 Chemistry topics, including The Periodic Table, chemical bonding and acids and alkalis</li> <li>• 15 Physics Topics, including waves, radioactivity and electromagnetism</li> </ul>	All of the content from Combined Science is covered as well as some extra topics. <ul style="list-style-type: none"> <li>• Biology extra topics include: the eye, the kidney and homeostasis</li> <li>• Chemistry extra topics include: transition metals, titrations and alcohols and carboxylic acids</li> <li>• Physics extra topics include: space, static electricity and colour</li> </ul>



<b>Exams</b>	All exams are 1 hour 10 minutes. Two exams in biology topics, two exams in chemistry topics and two exams in physics topics (6 exams in total). Pupils can take higher or foundation tier exams but must take the same tier for all of the exams. The maths content of exams will be 10% for Biology, 20% for Chemistry and 30% for Physics.	All exams are 1 hour 45 minutes. Two exams for GCSE Biology, two exams for GCSE Chemistry and two exams for GCSE Physics (6 exams in total). Pupils can take higher or foundation tier exams and can take different tiers in Biology, Chemistry and Physics. The maths content of exams will be 10% for Biology, 20% for Chemistry and 30% for Physics.
<b>Practical Activities</b>	A wide range of demonstrations and experiments will be carried out throughout the course to help understanding and engagement. There are also 6 biology, 5 chemistry and 7 physics core practicals that will be completed and may be assessed in exams.	A wide range of demonstrations and experiments will be carried out throughout the course to help understanding and engagement. There are also 8 Biology, 8 Chemistry and 8 Physics core practicals that will be completed and may be assessed in exams.
<b>Teaching</b>	The Science Department has Biology, Chemistry and Physics specialist teachers. Where it will help to extend pupils' understanding, they will be taught by different specialist teachers for Biology, Chemistry and Physics lessons. Where it will help to develop pupils' core Science skills and understanding, they will be taught by one teacher.	Pupils will have 3 different teachers. Each separate GCSE will be taught by a specialist in that subject (Biology, Chemistry or Physics).

#### Useful resources and further information

The subject specifications may help you to make your choice on whether Triple Science is a good option. The subject specifications are designed to let teachers know what content to teach so may give you a better understanding of the extra content covered.

The 'subject content' is numbered and those that end with a letter (e.g. 3.8B and 7.17P) are ones that are only studied in Triple Science.

[https://qualifications.pearson.com/content/dam/pdf/GCSE/Science/2016/Specification/GCSE\\_Biology\\_Spec.pdf](https://qualifications.pearson.com/content/dam/pdf/GCSE/Science/2016/Specification/GCSE_Biology_Spec.pdf)

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