

# KS4 Long Term Plan – 2021-2022

## Subject: Biology

## Exam Board: AQA

### Curriculum Statement of Intent Science

The aim of the Science department here at St Pauls' is:

***“Empowering students to take ownership of their learning enabling them to achieve outstanding results and become independent scientists realising the importance of science in their everyday lives. The Science Department are a dedicated, supportive team who value sharing good practice to make students be the best that they can be.”***

Science at St Paul's is about developing student's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying processing skills. We ensure that all children are exposed to high-quality teaching and learning experiences, which allow children to engage with practical experiments. They are immersed in scientific vocabulary, which aids students' knowledge and understanding not only of the topic they are studying, but of the world around them. We intend to provide all students with a broad and balanced Science curriculum and encourage them to develop a sense of excitement and curiosity about Science.

Science teaching at St.Paul's involves adapting and extending the curriculum to match all pupils' needs across all 3 Key Stages. We ensure that all students are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future;
- Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas;
- Help develop and extend our students scientific concept of their world;
- Build on our students natural curiosity and developing a scientific approach to problems;
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of 3 investigations – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating;
- Develop the use of scientific language, recording and techniques;
- Make links between science and other subjects.

## Curriculum Statement of Implementation

**KS4:** the GCSE Science curriculum is delivered across 3 years, currently with 2 Triple sets and 4 Trilogy sets in each year group. The students have 6 Science lessons a week, and each Science is taught by a specialist in that area which ensures that their subject knowledge is excellent. The curriculum is 'spiralled' so that the building blocks for each specialism are laid in Year 9 and then built upon throughout the 3 year program, with lots of quizzes and interleaving. We aim to finish teaching the curriculum content by December of Y11 so that we can then revise.

At the end of each topic the students have an End of Module test, which also includes an interleaved question from a previous topic, thus ensuring that the students are regularly reviewing previous learning. As well as embedding content throughout each module, the students also complete Required practicals, which help to develop their practical skills and promote their interest in science. These are written up in lab books which provide the method and also include exam style questions to help prepare them for external assessments.

We use 'Educake' for homework, which is an online Learning platform that develops the students AO1 skills. We also set Exam questions every few weeks to help the students develop their Higher level AO2 skills.

The impact and measure of our Science curriculum is to ensure students not only acquire the appropriate age related knowledge linked to the curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills;
- A richer vocabulary which will enable to articulate their understanding of taught concepts; and
- High aspirations, which will see them through to further study, work and a successful adult life.

2021/2022			
Week commencing	Trilogy	Triple	Year 9 Assessment Schedule
06/09/2021	<b>Cell Structure and transport</b> - 13 teaching lessons plus 4 assessment	<b>Cell Structure and transport</b> - 13 teaching lessons plus 4 assessment	
13/09/2021			
20/09/2021			
27/09/2021			
04/10/2021			
11/10/2021			
18/10/2021	Finish CS	Finish CS	
25/10/2021	Autumn half term		
01/11/2021	EOMT window		EOMT window
08/11/2021	Reflection	Reflection	Marks on spreadsheet
15/11/2021	<b>Animal and plant organ systems</b> - 19 teaching plus 4 assessment	<b>Animal and plant organ systems</b> - 19 teaching plus 4 assessment	Reports due Monday
22/11/2021			
29/11/2021			
06/12/2021			
13/12/2021			
20/12/2021	Christmas		
27/12/2021			
03/01/2022	Revision	Revision	
10/01/2022	Exams week	Exams week	Exams week
17/01/2022	Reflection	Reflection	Marks on spreadsheet
24/01/2022	Continue teaching Animal and plant organ systems	Continue teaching Animal and plant organ systems	Reports due Wednesday
31/01/2022			
07/02/2022			Parents evening
14/02/2022	Spring half term		
21/02/2022			
28/02/2022	EOMT window	EOMT window	
07/03/2022	Reflection	Reflection	
14/03/2022	<b>Bioenergetics</b> - 13 teaching lessons plus 4 assessment	<b>Bioenergetics</b> - 13 teaching lessons plus 4 assessment	
21/03/2022			
28/03/2022			
04/04/2022	Easter		
11/04/2022			
18/04/2022			
25/04/2022			
02/05/2022			
09/05/2022			
16/05/2022	Finish Bioenergetics - no EOMT	Finish Bioenergetics - no EOMT	
23/05/2022	Revise	Revise	
30/05/2022	Summer half term		
06/06/2022			Exams
13/06/2022			Exams
20/06/2022			Exams
27/06/2022	Reflection		
04/07/2022	<b>Ecology</b> - 14 lessons plus 4 assessment	<b>Ecology</b> - 23 lessons plus 4 assessment	
11/07/2022			
18/07/2022			Reports due Monday
<b>Year 10</b>	Finish Ecology		
	Disease		
	Biological Responses		
	Start Genetics and Reproduction		
<b>Year 11</b>	Finish Genetics and Reproduction		

2021/2022			
Week commencing	Trilogy	Triple	Year 10 Assessment Schedule
06/09/2021	<b>Disease</b> - 16 teaching lessons plus 4 assessments	<b>Disease</b> - 21 teaching lessons plus 4 assessments	
13/09/2021			
20/09/2021			
27/09/2021			
04/10/2021			
11/10/2021			
18/10/2021			
25/10/2021	Autumn half term		
01/11/2021			
08/11/2021			
15/11/2021	EoMT week		
22/11/2021	Reflection		
29/11/2021	Exams (ignore)	EoMT window	Exams (ignore)
06/12/2021	<b>Biological Responses</b> - 14 teaching lessons plus 4 assessment	Reflection	Marks on spreadsheet
13/12/2021		<b>Biological Responses</b> - 24 teaching lessons plus 4 assessment	Reports due Monday
20/12/2021	Christmas		
27/12/2021	Christmas		
03/01/2022			
10/01/2022			
17/01/2022			
24/01/2022			
31/01/2022			
07/02/2022			
14/02/2022	Spring half term		
21/02/2022	EoMT week		
28/02/2022	Reflection		
07/03/2022	<b>Ecology</b> - 14 teaching lessons plus 4 assessment		
14/03/2022			
21/03/2022	Finish teaching <b>Ecology lesson 6</b>	Finish teaching BR - DO NOT DO EOMT	Reports due Friday
28/03/2022	Revise for Paper 1	Revise for Paper 1	
04/04/2022	Easter		
11/04/2022	Easter		
18/04/2022			Exams
25/04/2022			Exams
02/05/2022	Reflection	Reflection	
09/05/2022	Continue teaching Ecology from <b>lesson 7</b>	<b>Ecology</b> - 24 teaching lessons plus 4 assessment	Reports due Friday
16/05/2022			
23/05/2022			
30/05/2022	Summer half term		
06/06/2022			
13/06/2022	EoMT window		
20/06/2022	Reflection		
27/06/2022	<b>Genetics and Reproduction</b> - 15 lessons plus assessments		
04/07/2022			
11/07/2022			
18/07/2022			
Y11	Finish G and R	Finish Ecology Teach G and R	

	2021/2022		
Week commencing	Trilogy	Triple	Year 11 Assessment Schedule
06/09/2021	<b>Genetics and Reproduction</b> from lesson 12 (Mutations) - 7 teaching lessons - <b>DO NOT DO EOMT.</b>	<b>Genetics and Reproduction</b> from lesson 10 (Variation) - 14 teaching lessons - <b>DO NOT DO EOMT.</b>	
13/09/2021			
20/09/2021			
27/09/2021		Finish teaching G and R on <b>Lesson 17</b>	
04/10/2021	Revision	Revision	
11/10/2021			Mocks
18/10/2021			Mocks
25/10/2021	Autumn half term		
01/11/2021	Mock Reflection	Mock Reflection	
08/11/2021	Revision Programme	Continue teaching G and R from <b>lesson 18- 6 lessons to go</b>	Reports due Wednesday
15/11/2021			Parents evening
22/11/2021			
29/11/2021			
06/12/2021		G and R EoMT	
13/12/2021		Reflection	
20/12/2021	Christmas		
27/12/2021	Christmas		
03/01/2022	Revise paper 1	Revise Ecology	
10/01/2022			
17/01/2022			
24/01/2022			
31/01/2022			PPEs
07/02/2022			PPEs
14/02/2022	Spring half term		
21/02/2022			
28/02/2022			
07/03/2022			Reports due Wednesday
14/03/2022			Parents evening
21/03/2022			
28/03/2022			
04/04/2022	Easter		
11/04/2022	Easter		
18/04/2022			
25/04/2022			
02/05/2022			
09/05/2022			
16/05/2022			GCSEs
23/05/2022			GCSEs
30/05/2022	Summer half term		
06/06/2022			GCSEs
13/06/2022			GCSEs
20/06/2022			GCSEs
27/06/2022			
04/07/2022			
11/07/2022			
18/07/2022			