

KS3 Long Term Plan 2021-2022

Subject: Science



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

KS3: the KS3 Science curriculum is delivered across 2 years. In year 7 the students are taught in tutor groups and in year 8 students are taught in ability groups. Students have 4 Science lessons a week, either with one teacher or split between two teachers.

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 a set of 'Required practicals', from the KS3 Lab Book. This helps to develop their practical skills and promote their interest in science. This also models and prepares students for the Required Practical component of the GCSE Science Exams.

We use 'Educake' for homework, which is an online Learning platform that develops the students AO1 skills. Students in year 7 are set 15 questions a week and students in year 8 are set 20 questions per week.

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.

WC	8I, 8N, 8U	8S, 8P, 8L	8A, 8T	Yr 8
06/09/2021				Yr8 Parent Information
13/09/2021				
20/09/2021	Biology 3	Chemistry 3	Physics 3	
27/09/2021				
04/10/2021				
11/10/2021	Chemistry 3	Physics 3	Biology 3	
18/10/2021				
Half Term Monday 25th October				
01/11/2021				Yr 8 window
08/11/2021	Chemistry 3	Physics 3	Biology 4	
15/11/2021				Autumn Progress reports Yr 8
22/11/2021				
29/11/2021	Physics 3	Biology 3	Chemistry 3	
06/12/2021				Yr 8 Parents Evening
13/12/2021				
School breaks up Friday 17/12/21 Back 04/1/2022. Christmas Holiday Monday 20th - Friday				
03/01/2022	Physics 3	Biology 3	Chemistry 3	
10/01/2022				
17/01/2022				
24/01/2022	Biology 4	Chemistry 4	Physics 4	
31/01/2022				
07/02/2022				
Half term 14/02/22 - 18/02/22				
21/02/2022				Revision
28/02/2022				
07/03/2022	Biology 4	Chemistry 4	Physics 4	Yr 7 & 8 exams
14/03/2022				
21/03/2022	Chemistry 4	Physics 4	Biology 4	Spring Progress reports Yr8
28/03/2022				
End of term Friday 01/04/2022 Returns Tuesday 19/04/2022				
18/04/2022	Chemistry 4	Physics 4	Biology 4	
25/04/2022				
02/05/2022				
09/05/2022				
16/05/2022	Physics 4	Biology 4	Chemistry 4	
23/05/2022				
Half Term 30/05/22 to 03/06/22				
06/06/2022	Physics 4	Biology 4	Chemistry 4	
13/06/2022				
20/06/2022	End of Year Assessment			Yr 8 Success Bus
27/06/2022				
04/07/2022				
11/07/2022				
18/07/2022				
Term ends for students Thursday 21st July Friday 22nd July is an Inset Day				

Biology 3 Food and Ecology
 Biology 4 Respiration and Disease
 Chemistry 3 Fuels and the Periodic Table
 Chemistry 4 Reactions and Geology
 Physics 3 States and matter and Light
 Physics 4 Space

WC	7C & 7R	7D, 7J & 7T	7A & 7E	Yr 7
06/09/2021	Biology 1	Chemistry 1	Physics 1	CATS
13/09/2021				Yr7 Parent Information
20/09/2021				Open Day & Evening
27/09/2021				
04/10/2021				
11/10/2021	Chemistry 1	Physics 1	Biology 1	Autumn 1 Settling in Reports Yr 7
18/10/2021				
Half Term Monday 25th October				
01/11/2021	Chemistry 1	Physics 1	Biology 2	
08/11/2021				
15/11/2021				
22/11/2021	Physics 1	Biology 1	Chemistry 1	Yr 7 window
29/11/2021				
06/12/2021				Autumn 2 Progress reports
13/12/2021				
School breaks up Friday 17/12/21 Back 04/1/2022. Christmas Holiday Monday 20th - Friday				
03/01/2022	Physics 1	Biology 1	Chemistry 1	
10/01/2022				Yr 7 Parents Evening Wednesday
17/01/2022	Biology 2	Chemistry 2	Physics 2	
24/01/2022				
31/01/2022				
07/02/2022				
Half term 14/02/22 - 18/02/22				
21/02/2022	Revision			
28/02/2022				Yr 7 & 8 exams
07/03/2022	Biology 2	Chemistry 2	Physics 2	
14/03/2022	Chemistry 2	Physics 2	Biology 2	Spring Progress reports Yr7
21/03/2022				
28/03/2022				
End of term Friday 01/04/2022 Returns Tuesday 19/04/2022				
18/04/2022	Chemistry 2	Physics 2	Biology 2	
25/04/2022				
02/05/2022				
09/05/2022	Physics 2	Biology 2	Chemistry 2	
16/05/2022				
23/05/2022				
Half Term 30/05/22 to 03/06/22				
06/06/2022	Physics 2	Biology 2	Chemistry 2	Yr 7 8 9 window
13/06/2022				
20/06/2022	End of Year Assessment			
27/06/2022				
04/07/2022				
11/07/2022				Yr 7 Success Bus
18/07/2022				Summer Progress Reports completed by Monday 15/07/22 and sent home. Yrs 7, 8, 9 & 12
Term ends for students Thursday 21st July Friday 22nd July is an Inset Day				

Biology 1	Cells
Biology 2	Reproduction
Chemistry 1	Particles
Chemistry 2	Acids and Elements
Physics 1	Energy and Forces
Physics 2	Electricity and Sound