

KS3 Long Term Plan 2020-2021

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.

Year 7 Long term plan

YEAR 7 LONG TERM PLAN		
Module	Duration	Assessment completed by week beginning
B1: Cells	14 lessons	28 th September
C1: Atoms	14 lessons	2 nd November
P1: Energy	14 lessons	23 rd November
Year 7 Core Assessments	1 week	30 th November

No required practicals in their lab books can take place when social distancing is in place

Year 8 Long term plan

YEAR 8 LONG TERM PLAN		
Module	Duration	Assessment completed by week beginning
B3: Ecosystems and Evolution	13 lessons	28 th September
C3: Periodic Table	13 lessons	19 th October
P3: Waves and Space	13 lessons	16 th November
Year 8 Core Assessments	1 week	23 rd November

No required practicals in their lab books can take place when social distancing is in place