

Science in the Primary Challenge Pathway



Subject Rationale:

A high-quality science curriculum providing the foundations for understanding the world around us. Students will participate in a fun and safe environment to help build up a body of key knowledge and concepts and are encouraged to see how this can be used to explain what they see and experience in everyday life.

Students will work on the working scientifically skills ladder and progress in five main skills:

- 1. Practical skills
- 2. Maths skills
- 3. Demonstrating Knowledge and understanding
- 4. Applying knowledge and understanding
- 5. Drawing conclusions

Science in the 'Primary Challenge' Pathway		
Intent	Implementation	Impact
 Students will cover a range of topics covering all areas of Science: Biology, Chemistry, Physics and working scientifically. This will help them to develop knowledge and understanding of the world they live in and allow them to link what they learn in the classroom to things that they see and experience in everyday life. 	 Long-term 'spiral' topic mapping of science content (Biology, chemistry, and physics) with the opportunity to revisit prior learning as students' progress through the different key stages. These are linked to appropriate SLD schemes of work for lower ability students and 'Switched on Science' SOW for those who may be able to access this. Coverage of half-termly topics with a clear 'working scientifically' practical assessment linked to learning that has been taking place in class. Students will work on the working scientifically skills ladder and will focus on: Following simple methods Making logical predictions Collecting and recording appropriate data Giving conclusions using collected data Topic Knowledge maps to help recognise how to support students to gain further knowledge and understanding on key areas. Key vocabulary is identified on these and students are encouraged to use scientific vocabulary when possible. Encourage students to think curiously about the world around them and question what they may experience. 	The impact of the Primary Challenge Pathway provision is demonstrated through the development of pupils who are: • Confident hands-on learners who can demonstrate strong practical and maths skills (with support if needed). • Students who demonstrate curiosity and are eager to learn about the world they live in. • Logical thinkers who are beginning to draw on life experiences/previous knowledge to form ideas and concepts. • Students are beginning to apply correct scientific vocabulary with ease and confidence.