Curriculum intent in Science

Academy intent statement	In Science we:	In order to:	Progress
Be knowledge based, accessible and aspirational for all students The curriculum aims to develop for all: an understanding of the 'big ideas' in science and of science and ideas about science and its role in society, scientific skills of gathering and using evidence and Scientific attitudes.	• Medium term plans produced from schemes of work for each class to ensure it is challenging, accessible and aspirational • In Years 7-11 student assessments are planned with individualised improvement work provided after each assessment. • Assessments are differentiated H,F and EL. • Ensure access to Personal Learning Checklists for both staff and students • Use SLOP and mastery booklets to develop long term memory through spaced retrieval. • Provide low stake quizzes to recap topics. • Provide morning and evening revision and booster sessions.	Allow students to: • Identify a clear pathway (spiralling curriculum) to connect Key Stage 2 to Key Stage 3 to the GCSE syllabus. • Deepen topic knowledge, understanding and develop skills suited to the individual. • Develop skills so that students can become independent learners and lifelong learners.	Working towards 'Big Picture' for students.
Enable students to make choices to keep themselves safe and well	• Develop students' communication & reasoning skills • Enable every individual to take an informed part in decisions, and to take appropriate actions that affect their own wellbeing and the wellbeing of society and the environment • Ask students to question/scrutinise ideas and information, is it valid? Is there bias?	• Enable students to be independent thinkers and evaluate data / information in order to make reasoned and informed decisions.	
Raise aspirations and prepare students for successful progression post-16	• We plan to to provide a line of sight for our students and demonstrate how the lifelong learning of science is relevant for their daily lives and the skills developed are relevant for all occupations and future occupations. • Provide opportunity for students to experience a variety of STEM based activities and trips to raise aspirations • Discuss potential careers links with our subject where appropriate, e.g. graphic design, computer science, scientific fields, engineers,	• Enable students to be independent thinkers and evaluate data and information to make reasoned and informed decisions. • Develop skills so that students can become independent learners and lifelong learners. • Build confidence in communication/reasoning for life and work • Raise aspirations to those with potential for studying STEM subjects to above GCSE level, particularly from under-represented groups. • Broaden students' understanding of potential uses for the	

	economists/financial sectors, etc.	skills they learn and practise in Science.	
Ensure students develop knowledge, confidence and skill within English and Maths	• Pursue good practice from other departments and support science colleagues where necessary to develop those skills. • Highlighting maths skills in pupils' lessons. • Seek congruence within the science and maths curriculum. • Use IPEELL when planning extended writing tasks in Y7 and Y8. • In Y7 and Y8 there is a dedicated 15 minutes to reading at the start of each lesson. • We develop extended writing skills at GCSE with a focus on understanding the command words.	• Reading and writing are essential skills for learning and, therefore, essential for scientific learning. • Ensure that students can access and understand the world around them through scientific learning.	
Develop cultural capital	• Give real-life examples of how Science skills build for lifelong learning • Discuss where appropriate the impact science has had on politics, religion, gender, class and society as a whole. • Discussion about the rich cultural history of science; key scientists from different backgrounds; challenges faced by careers around STEM (lack of women, etc.) • Provide opportunity for students to experience a variety of STEM based activities and trips to raise aspirations	• Show students the relevance of the skills they are learning for their own futures • Develop students' understanding of the world they live in & the technology they use and also of the world that came before them. • Enable students to be independent thinkers and evaluate data and information to make reasoned and informed decisions.	
Develop skills and understanding for life in modern Britain	• Explore how Britain and British values are represented in Science.	• Deepen students' understanding of their country and the origins of current thinking and social structures • Challenge each other's' ideas about British values and to deepen students' understanding of key areas in our society	
Promote the development of personal qualities such as commitment to learning, respect for others, resilience, pride	•	•	

in achievement and independence			

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