

KS3 Science: We can research



	What we do	When we do it (e.g. Term 3)	How it helps students to develop our Alive theme
Year 7 Year 8	Reading and comprehension home learning (NEW TO 2023-2024 academic year) This is including: Why research is important to challenge fake news, what makes an excellent scientist, researching scientific phenomenon The ALIVE Scientist – NEW To 2023-2024 A series of lessons with the intention to develop student ability to research career paths in science, learn about famous scientists across various groups KS3 Core practicals	Terms 1 – Term 6 Once per rotation (Between summative assessments – 4 in a year)	This helps students to understand the reasons and methodology of research within science. They gain an appreciation of the level of detail required to make well-informed, objective life choices and the research required to acquire this knowledge Students challenge the idea that scientists are all 'old white males' and that anyone can become a scientist regardless of their socio-economic backgrounds. Students research scientists from groups such as LGBTQIA+, different ethnicities, gender identities, pay groups etc
Year 9	Bright futures – Preparing for GCSEs Year 9 Science Fayre (Date to be confirmed) KS3 Core practicals	Term 3	This helps students to make decisions on GCSE options by allowing them time to research career paths and pre-requisites.



Science Year 7 Alive Themes



Term	Alive Theme	Examples of themes in the curriculum	How it helps students to develop that Alive theme
All terms	We Can Communicate	Developing clear explanations Lesson power-points contain structure for writing extended/open ended answers. Method is consistent across the lessons	Students learn to use evidence to inform their statements and communicate this in a logical and coherent manner
	We Are Organised We Value Ourselves	PRIDE (book standards) Displayed on boards in every classroom. Students rate their work based on the PRIDE standards	Students understand that link between being organised and careful with their work and link this to successes.
	We Can Review	MCQs and assessments Every topic has a series of multiple-choice questions and a formative assessment that students complete. These are either peer, self or teacher marked and feedback is acted upon and utilised in later assessments	Students engage with feedback cycles and use feedback as a means to review work and improve their scientific literacy
1	We Value Trust And Truth	Claims and evidence – Explicitly teach what a claim is and how to collect evidence to prove/disprove a claim Fake news – Scenario based reading and comprehension task.	Students look at information objectively and learn about reputable sources of information
3	We Value Justice And Respect We Value Diversity And Choice We Can Question	Topic on Sexual reproduction The topic introduces the science behind reproduction and teaches students about sex and reproduction. While not explicit, students often ask questions about sex vs gender, choices and parenting. Concepts such as IVF are taught	Students are given the freedom to ask questions to help them construct knowledge of very relevant and mature concepts.
6	We Value Diversity And Choice	Science Heroes Yearly competition held where students are to research scientists from under-represented groups e.g. Ethnicity, LGBTQIA+, BAME, disabled	Students appreciate that science is for everyone and that there are a variety of career paths students could follow within science



Science Year 8 Alive Themes



Term	Alive Theme	Examples of themes in the curriculum	How it helps students to develop that Alive theme
All terms	We Can Communicate	Developing clear explanations Lesson power-points contain structure for writing extended/open ended answers. Method is consistent across the lessons	Students learn to use evidence to inform their statements and communicate this in a logical and coherent manner
	We Are Organised We Value Ourselves	PRIDE (book standards) Displayed on boards in every classroom. Students rate their work based on the PRIDE standards	Students understand that link between being organised and careful with their work and link this to successes.
	We Can Review	MCQs and assessments Every topic has a series of multiple-choice questions and a formative assessment that students complete. These are either peer, self or teacher marked and feedback is acted upon and utilised in later assessments	Students engage with feedback cycles and use feedback as a means to review work and improve their scientific literacy
1	We Value Ourselves	Food and nutrition Students are explicitly taught about nutrition and maintaining a balanced diet. They are also taught about the different types of malnutrition (including anorexia and obesity) and the effects these have on mental and physical health	Students evaluate their own diets and use these ideas to comment on how they can improve their diets or make well informed choices
3	We Can Contribute We Are Forgiving	Global warming/pollution and acid rain Students are taught about the link between human activity and current issues such as global warming. They learn to appreciate why we have such issues linking to growth in technology and industrial efforts	Students learn about why it is important to recycle and the science behind recycling.
6	We Can Question We Are Creative We Are Interdependent We Are Organised	Year 8 Science Fayre (new to 2023-2024) Students (in pairs) run an independent home learning in which they must design and run an investigation. The methodology and conclusions are communicated at the science fayre	Students formulate their own hypothesis and are creative when it comes to experimentation and write up They work interdependently with their partner to develop and communicate their experiment to the public



Science Year 9 Alive Themes



Term	Alive Theme	Examples of themes in the curriculum	How it helps students to develop that Alive theme
All terms	We can communicate	Developing clear explanations Lesson power-points contain structure for writing extended/open ended answers. Method is consistent across the lessons	Students learn to use evidence to inform their statements and communicate this in a logical and coherent manner
	We are organised We value ourselves	PRIDE (book standards) Displayed on boards in every classroom. Students rate their work based on the PRIDE standards	Students understand that link between being organised and careful with their work and link this to successes.
	We can review	MCQs and assessments Every topic has a series of multiple-choice questions and a formative assessment that students complete. These are either peer, self or teacher marked and feedback is acted upon and utilised in later assessments	Students engage with feedback cycles and use feedback as a means to review work and improve their scientific literacy
1	We value ourselves	Pathogens and diseases A topic designed to teach students about the different types of diseases and how they work/are treated. We aim to teach about anti-biotics, painkillers and anti-virals/fungals.	Students learn about why it is important to take the correct prescription medication with the correct dosage based on different types of pathogen
3	We value ourselves	Bright futures – Careers in science Before GCSE choices students are given an opportunity to find out about different career paths, salaries and pre- requisites of science based jobs. T	Students make the choice between combined and separate science based on future goals and aspirations. They learn about different careers in science to help them make good choices for their futures
6	We value ourselves We value justice and respect We value diversity and choice	Sex and relationships A topic delivered to teach students about safe sex, relationships, consent, sexually transmitted infections and protection.	Students learn why it is important to practice safe sex and the means to do so. They learn about the importance of respect, and choice when dealing with relationships and sexual health