Science long-term planning

Across the curriculum, for each pathway of learners, expectations and learning intentions are highly adapted to meet the needs of individual students, whilst providing an appropriate amount of challenge and skills development to support their next steps.
Throughout all unit, students should develop skills of working scientifically, take part in investigations and practical experiments. Within each unit students will also learn about significant scientists and their discoveries and achievements. Across the curriculum students will be introduced to links to careers and the applications in the world of work.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Working scientifically lab skills	Materials everyday materials	How things work season changes light	How things work light & sound	Living things plants	Living things human body
Year 8	Living things plants	Living things habitats & interdependence	Materials states of matter changing materials	Materials acids & alkalis	How things work electricity	How things work forces magnets
Year 9	How things work Earth and space	How things work forces waves	Living things human body cells	Living things inheritance & genetics adaption & variation	Materials Earth and atmosphere	Materials rocks the environment
Year 10	OCR Entry level biology units or AQA unit award – Human body or AQA unit award – Experiential learning about the human body.		OCR Entry level chemistry units or AQA unit award – Acids and alkalis or AQA unit award – Experiential learning about chemical reactions and safety including acids and alkalis.		OCR Entry level physics units or AQA unit award – Electricity or AQA unit award – Experiential learning about electricity.	

Year 11	OCR Entry level chemistry units or AQA unit award – Changes of state or AQA unit award – Experiential learning about changes of state	OCR Entry level physics units or AQA unit award – Space or AQA unit award – Experiential learning about Space	OCR Entry level biology units or AQA unit award – Habitats or AQA unit award – Experiential learning about habitats
6th form	Crest Awards Star, Superstar & Discovery Awards Students will develop their use of STEM skills (Self-management, Team working, Problem solving, Research, Communication, Reflective practice.) whilst carrying out a practical investigation around an everyday problem. Students will focus on one or more aspects of the investigation cycle during their practical activity. Students will successfully carry out the practical task as described. Students will reflect on and self-assess their learning and development of skills.	Crest Awards Star, Superstar or Discovery Awards Students will develop their use of STEM skills (Self-management, Team working, Problem solving, Research, Communication, Reflective practice.) whilst carrying out a practical investigation around an everyday problem. Students will focus on one or more aspects of the investigation cycle during their practical activity. Students will successfully carry out the practical task as described. Students will reflect on and self-assess their learning and development of skills.	Crest Awards Star, Superstar & Discovery Awards Students will develop their use of STEM skills (Self-management, Team working, Problem solving, Research, Communication, Reflective practice.) whilst carrying out a practical investigation around an everyday problem. Students will focus on one or more aspects of the investigation cycle during their practical activity. Students will successfully carry out the practical task as described. Students will reflect on and self-assess their learning and development of skills.