

2023-2024 Year 7 Curriculum and Assessment Plan for Science

<p>The curriculum and assessment of pupils at this stage of education has been carefully designed to inspire a love of Science and discovery, establishing a foundation in the required skills and knowledge needed for progression to, and success at, GCSE and beyond.</p>					
<p>Half Term 1:</p> <p>All pupils will know: The fundamental investigative skills, particle model, states of matter and separating substances - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed by: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills as part of the data gathering for the whole year group twice a year.</p> <p>Impact- Why do we teach this? Our programme of study is based on the National Curriculum and designed to provide our students with breadth and depth of topics and concepts which underpin scientific thought, processes and theory. We begin with units that introduce fundamental concepts that are then developed over the three years.</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Microscopy skills • Investigative skills • Reading skills • Vocabulary terms • How science works 	<p>Half Term 2:</p> <p>All pupils will know: The role of cells as the fundamental unit of life, roles of specialised cells, transport between them, the role of the muscular skeletal system - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills as part of the data gathering for the whole year group twice a year.</p> <p>Impact - Why do we teach this? Our programme of study is based on the National Curriculum and designed to provide our students with breadth and depth of topics and concepts which underpin scientific thought, processes and theory. We begin with units that introduce fundamental concepts that are then developed over the three years.</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Investigative skills • Reading skills • Vocabulary terms • How science works 	<p>Half Term 3:</p> <p>All pupils will know: The fundamentals of electricity through circuits, current and voltage and how organisms are interdependent and interconnected - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills as part of the data gathering for the whole year group twice a year.</p> <p>Impact - Why do we teach this? Our programme of study is based on the National Curriculum and designed to provide our students with breadth and depth of topics and concepts which underpin scientific thought, processes and theory. We begin with units that introduce fundamental concepts that are then developed over the three years.</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Investigative skills • Reading skills • Vocabulary terms • How science works
	<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>		<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>		<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>
	<p>Key Vocabulary: Can be found in student's knowledge organisers and core questions for the topics covered.</p>		<p>Key Vocabulary: Can be found in student's knowledge organisers and core questions for the topics covered.</p>		<p>Key Vocabulary: Can be found in student's knowledge organisers and core questions for the topics covered.</p>
	<p>Opportunity for cross-curricular skill development</p> <ul style="list-style-type: none"> • Calculations • Graph drawing • Working safely with equipment 		<p>Opportunity for cross-curricular skill development</p> <ul style="list-style-type: none"> • Calculations • Graph drawing • Muscles - PE 		<p>Opportunity for cross-curricular skill development</p> <ul style="list-style-type: none"> • Calculations • Graph drawing • Ecology and interdependence
<p>Half Term 4:</p> <p>All pupils will know: The rock cycle and types of rock, energy types, stores and transfers, and human reproduction and development - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills as part of</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Investigative skills • Reading skills • Vocabulary terms • How science works 	<p>Half Term 5:</p> <p>All pupils will know: How plants reproduce and what sound is and travels - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills as part of the data gathering for the whole year group twice a year.</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Investigative skills • Reading skills • Vocabulary terms • How science works 	<p>Half Term 6:</p> <p>All pupils will know: Principles of light, the effect of forces including gravity and an overview of the universe – days, seasons, years and planets - as outlined in the National Curriculum Science Programme of Study. Science programmes of study: key stage 3 (publishing.service.gov.uk)</p> <p>All pupils will be assessed: By short recall activities, electronic automatically marked homework and interleaved longer recall tests, focussed on several topics. There will also be a longer assessment, including descriptive, explanatory, analytical and data skills</p>	<p>Subject specific skills being developed:</p> <ul style="list-style-type: none"> • Investigative skills • Reading skills • Vocabulary terms • How science works
	<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>		<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>		<p>Reading Skills needed for this unit: Skimming, scanning summarising, comprehension and retrieval, analysis, evaluation.</p>

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<p>Ensuring this curriculum meets the needs of all pupils: this curriculum has been designed to ensure pupils from all starting points will develop the key curriculum skills and knowledge identified. The curriculum design ensures that each unit forms part of the overall learning journey and there are opportunities for revisiting skills and linking together key pieces of knowledge. Whole Academy policies and practices are followed to tailor the delivery of the curriculum for individuals and groups of students. For example SEND students have individual learning profiles that outline needs/strategies to be used, Whole group RIPs are in place to identify key teaching strategies that will be used with individual teaching groups. Ongoing formative assessment and clear summative assessment points allow individual staff and departments to identify misconception and adjust curriculum appropriately.</p>					
<p>Enrichment opportunities:</p> <ul style="list-style-type: none"> ● STEM club after school 					
<p>Career opportunities/ links:</p>					