



Curriculum Overview Document

3III's Science



Our whole School curriculum vision believes:

Kickstart Academy is committed to providing a safe, caring and stimulating environment for all students. This allows our young people to re-engage with learning and either return to mainstream schooling or achieve success whilst remaining with ourselves. During this time, the learning needs of each individual pupil are accurately assessed to support personalisation of learning.

Our main aims as an academy are:

- To keep our students safe
- To provide a high quality of education
- Help our students to personally develop
- Improve outcomes for our young people

Our curriculum is the vehicle to deliver our whole-school vision and we believe that the delivery of an effective curriculum to help improve educational outcomes is a vital way to positively impact our students' futures. We endeavour to further our students' intellectual development, social and emotional development, character and responsibility, happiness, and success.

We underpin our curriculum using our whole school values: Belong, Respect, Inspire, Succeed, Enjoy. Our teachers aim to develop and deliver the curriculum in a way that remains true to the subjects' core content and concepts, creates a safe learning environment, encourages progression, and develops a lifelong love of learning.

Our whole School curriculum intent believes:

Our intent is to provide students with educational success and provide them with the opportunities to develop the essential skills and knowledge that they remember, not just encounter, ready for the next stage of their lives. This may be when they return to mainstream school or when they leave Year 11 and embark on their journey into further education, training, or employment. Our curriculum is designed for progression and to be

inclusive for all whilst setting high expectations of our learners. We encourage our students to be active thinkers with the product of knowledge being our overarching goal.

We aim to provide a broad curriculum that offers a range of academic and vocational pathways whilst fostering creativity and developing critical thinking. We intend for our students to leave Kickstart with an ability to read, write, and communicate effectively. We also have a strong focus on the personal and social development of our students that allows them to understand and manage their emotions, recognise risk, increase resilience, and further their knowledge on the culturally rich communities in which they live.

As a school we also work closely with outside agencies, to help further support our young people to the greatest extent. Our target is for our students to leave Kickstart with an increased cultural capital that supports their development and allows them to achieve success beyond the classroom.

We strive to identify and work on the different and individual needs of our young people within school to help them develop in whatever they require for success. We aim to identify their individual needs and gaps in learning whilst supporting them through the use of differentiation. It is our intention that our students leave with a broad knowledge and understanding of the British Values and understand the positive impact they can have on their communities.

Improving outcomes for our young people is of utmost importance to us. We look to maximise attendance and punctuality, to ensure our students can access the provision they need to help them remain safe, improve their well-being, and succeed. We also have a key focus on behaviour management, with a very skilled staff team that work closely with our students to ensure that behaviour for learning is positive.

Our intention for our curriculum is:

Scientists at Kickstart Academy will have an appreciation for the world they live in and a deep understanding of how things work and the impact their actions can have on the world around them. By the end of their time at Kickstart, pupils will understand what it is to be a scientist. Pupils will have a curiosity and fascination in finding out about the world and how things work as well as an appreciation of the value of science in every aspect of their life and the wider world. Our pupils will have developed an excellent knowledge of many of the areas within science, deepening and expanding their knowledge and understanding of how the world works. They will have a holistic understanding of the ways in which the many aspects that make up the universe are connected, and how everything from the smallest atom to the largest planet are interrelated.

Pupils will develop a comprehensive understanding of the multiple areas within science and will develop an extensive core of scientific knowledge and vocabulary, which will be learned and regularly practised so that students are confident and comfortable using academic language in every context that requires it throughout their education and beyond. They will be able to utilise their own investigative skills in a range of contexts; utilising their knowledge

and understanding of theoretical and practical science to take an in-depth view of the world. Kickstart scientists will be able to carry out complex and increasingly independent enquiries and experiments, ask their own relevant questions, make sense of scientific data, think critically about different views, and justify their own hypotheses in order to derive a reasoned and valid conclusion. They will then be able to explain their reasoning and conclusions using relevant and subject specific vocabulary.

As successful scientists, they will develop transferable and specialised skills. Skills and methods are interwoven throughout the program of study with a focus on consolidating numeracy skills via strong cross curricular links, commonality in methodologies and terminologies. In doing so they will consolidate and extend key skills which they will be able to apply in a range of scenarios.

Within KS4 they will secure foundation knowledge and then expand on this further to ensure a deep and broad understanding. They will have the knowledge and understanding to enable them to apply what they know to both familiar and unfamiliar situations which will help them to go on to achieve their potential as young scientists entering a diverse, dynamic and interdependent world.

Linking our curriculum intention to our local community:

The curriculum, through enrichment during the school day and within enrichment opportunities, will maximise the use of the local area. We will link our curriculum to the following:

- Telford college/HLC – microscopy – British values – sharing resources
- Admaston House – Cooking - Cross curricular - physical and chemical reactions
- Albrighton Moat – Fishing – Cross curricular - Ecosystems and sustainability (This depends on the available vocational activities)
- Boxing – Cross curricular – the human body/body systems

Implementation

Lessons are engaging because they are rigorous. Students want to succeed, and, through hard work and achievement, they want to learn more. Modelling is a key aspect of teaching in geography. Through regular feedback and guided practice students master key concepts, places and processes. Teachers explicitly teach students how to learn and revise so that they can be successful in regular knowledge and vocabulary tests. This helps to ensure long-term retention of core principles from KS3 through to KS4 and beyond. Fieldwork opportunities at KS3 and 4 provide students with real world contexts to apply their knowledge. Key concepts are revisited over key stages as well as between lessons to practice retrieval and recall.

Lessons are engaging and sequential and are planned in smaller units (with relevant extension and challenge activities) to allow for progression and understanding without losing student interest. Students they are planned to fit in to a specific topic each half term allowing time to develop foundation knowledge and deeper more specific learning. Through regular feedback and guided practice students expand on their knowledge, master key concepts and develop understanding of processes.

To ensure our aims for the curriculum are implemented effectively we instil 6 core values into our curriculum known as 'The Kickstart 6.' In Science this is achieved in the following ways:

Knowledge

- Use of retrieval practice of topics taught using a combination of short term and longer-term memory (lesson visuals, and 'Do Now' activities etc.)
- Reducing cognitive overload when introducing new topics by chunking information down, modelling new concepts ('I Do / We Do / You Do' etc.) and using regular low-stakes assessment to check new learning.
- Developing subject knowledge of teachers regularly through CPD.

In science, key concepts in each of the three specialisms Biology, Chemistry and Physics are revisited and built upon to ensure a solid foundation knowledge and ensure long term retention and the development of well-rounded and knowledgeable scientists.

Explanation and Practice

- Teacher-led explanations are clear and concise.
- Information is provided in a student-friendly way that is accessible by all.
- Information is chunked when necessary.
- Guided and independent practice is embedded within lessons using clear success criteria.

In science explanations are linked to everyday events and supported by visual demonstrations, observations and practical's.

Modelling and Scaffolding

- New concepts, tasks, and knowledge are modelled first with differentiated scaffoldings provided where required to help build students' confidence

- A variety of models (worked examples, live modelling etc.) are shared with students to enhance their understanding.
 - Scaffolding is withdrawn when teachers have assessed that students are ready.
 - In Art at the start of each new skill students are given a demonstration of skills before they try for themselves.
- Students in Art use their sketchbooks to explore ideas, to build and develop their ideas.

In Science, modelled and practical activities are key aspects of teaching within Science. Pupils are given access to a range of lesson formats including practical sessions, modelled activities, theoretical sessions, and visual aids and the 'I Do', 'We Do', 'You Do' model. Fieldwork, experiments, or visits from experts can be utilised to enhance the learning experience and provide real world contexts.

Questioning

- Targeted questions are used to gain live feedback from students in the lesson.
- A variety of questioning methods are used (cold calling, show-me boards etc.)
- Questioning is used to allow students to deepen their understanding through subject-specific terminology and academic dialogue.

In science questioning is used to check for understanding and probe students thinking, activate prior learning and encourage thinking, stirring curiosity which is one of the key pillars in science.

Feedback

- Feedback includes a combination of live questioning within the classroom and more deeply marked pieces of work.
- Feedback is personalised (Pink for Think, live marking etc.) to allow students to progress with their individual learning.
- Feedback is given in a positive, encouraging, and constructive way (WWW and EBI etc.)
- Students are actively encouraged to engage with feedback (DIRT, Purple for Progress etc.) to address learning gaps.

Behaviour and Relationships

- Teachers create environments in which all students feel safe.
- Positive and professional relationships are established through clear roles, routines, expectations, and boundaries.
- Routines and behaviours are rehearsed and positively modelled by staff.
- Differentiated behaviour management strategies are applied to help challenge and correct student behaviour.

We are implementing a transition from AQA Combined Synergy to AQA Combined Trilogy as well as covering entry level content. The same content will be covered but in a more suitable sequence. We are moving away from a 2 year rolling programme in to a new curriculum implementation to encourage development of skills in a sequential and supportive manner.

Year 10 Curriculum implementation: Emerging and developing our skills and understanding in order to be a Scientist.

1	2	3	4	5	6
<p>Topic 1: Introducing science AQA trilogy WJEC/entry level. Baseline assessments.</p> <p>This initial unit introduces students to the fundamentals of our science qualifications. Due to the limited access some of our students have experienced within this subject we complete transition test baseline assessments that will give us a better understanding as to the student's current knowledge and aims. first unit so that by the end of this half term.</p>	<p>Topics 1: Infectious diseases/communicable and non-communicable diseases</p> <p>This half term students have the opportunity to investigate health and disease. Consolidating and building upon previous understanding with reference to cell structure (from ,last half term) and exploring the concept of disease causing microorganisms (pathogens). Students will be able to categorise</p>	<p>Topic 1: Atoms, elements and compounds</p> <p>The start of the spring term will focus on atoms, elements and compounds. Depending on previous experience some of our students have shown a very limited understanding of the theory of science. We cover a range of foundation information before further developing and mastering our understanding to give all students the opportunity to develop as well-rounded scientists.</p> <p>Within this unit we cover what the periodic table is; including some history on who developed the modern version of the periodic table, we look at what an atom is and explore its structure.</p> <p>Using a mixture of methods, experiences and learning styles</p>	<p>Topic 1: Quantitative chemistry</p> <p>Within the second part of the Spring term we will be looking at quantitative chemistry. This unit has a strong mathematics overlap with sections on ratios, percentages and balanced equations.</p> <p>Spring 1's topics on atoms and the periodic table will help feed in to our understanding within this topic.</p> <p>Topic 2: Electrolysis</p>	<p>Topic 1: Energy</p> <p>The start of Spring term we will focus on energy. We consider what energy is and encourage students to explore their own thoughts on this and where they envisage energy in their day-to-day lives. This is then built on to develop understanding of the relevant terminology and the types of both energy stores and transfers that occur.</p> <p>This topic underpins a key concept in physics with an introduction to energy stores; the work equation and potential energy equations to support numeracy and continue the theme of</p>	<p>Topic 1: Electricity continued</p> <p>We continue with our Electricity topic into the second half of the summer term. Students will have the opportunity to create circuits as well as learn the safety aspects of electricity and how to safely wire a plug. We will be looking in depth on the purpose of the wires and their plastic coating and will be able to link our overall learning this back to prior learning in Yr10 Spring 1 (metals).</p> <p>Topic 2: Radiation</p> <p>We are able to challenge our students within this</p>

<p><u>Topic 2: What is the body made of?</u></p> <p>Our second topic focuses on our understanding of the human body. It gives the students the opportunity to develop their knowledge of levels of organisation within the body as well as specifically focussing on a number of body systems. This unit gives opportunity for a range of cross curricular links and ties in with the RSE curriculum through coverage of human body.</p> <p>This topic allows students to explore their understanding of the human body through a range of activities and learning styles.</p> <p><u>End of half term assessments comprise of topic</u></p>	<p>diseases as communicable and non-communicable and investigate how they are spread, vaccinations and the discovery of medicinal drugs to treat illness. This opportunity enables the incorporation of cultural capital through discussion of relevant scientists, such as Alexander Fleming, Ignaz Semmelweis and/or Louis Pasteur. This topic also links back to healthy choices with an exploration in to sexually transmitted diseases including how they are transmitted, symptoms, how they are prevented, treated and the harm they can do.</p> <p><u>End of half term assessments</u></p>	<p>we explore areas such as particle theory, changes in state and types of mixtures and compounds.</p> <p>Students will have the opportunity to plan and complete practical investigations utilising techniques such as chromatography.</p> <p>Students will have completed science investigations following a sequence of investigation involving aims, hypothesis, methods of data collection, data presentation, data analysis, conclusions and evaluations.</p> <p>We will be further developing our skills on writing extended answers, explaining a hypothesis and utilising correct scientific terminology within our conclusions.</p> <p>Topic 2: Metals and non-metals</p> <p>This unit focuses on metals and non-metals. Within this topic we consider what an alloy is, common alloys, how metal is extracted, the affect on the landscape and pollution,</p>	<p>GCSE level practical's such as investigating electrolysis of aqueous solutions using inert electrodes are explored through simulations, videos and in practical scenarios where possible to allow students to develop their understanding and complete GCSE level investigations.</p> <p><u>End of half term assessments comprise of Entry level assessments, topic specific questions and Mock/GCSE paper practise as relevant.</u></p>	<p>underpinning Science with maths.</p> <p>Utilising both theoretical and practical experiences within lesson we explore how energy is transferred and consider a range of ways that this is recorded.</p> <p>There is a strong cross curricular mathematics link within this unit as we utilise a range of formula triangles to calculate types of energy and energy efficiency. Students are encouraged to show their working out and we explore how to rearrange the formulas to fully utilise them.</p> <p>Due to this topics relationship with forces such as gravity and other relevant subjects including friction and air resistance we have a strong opportunity to recap on, and further</p>	<p>unit by researching and discussing further complex areas of the curriculum including radiation, half life and polymers.</p> <p><u>End of half term assessments comprise of Entry level assessments, topic specific questions and Mock/GCSE paper practise as relevant.</u></p>
---	---	---	--	--	--

<p><u>specific questions and Mock/GCSE paper practise as relevant.</u></p>	<p><u>comprise of Entry level assessments, topic specific questions and Mock/GCSE paper practise as relevant.</u></p>	<p>recycling metals and how metals react. We identify and utilise prior knowledge when considering the properties and uses of metals within both the students' day-to-day lives and experiences as well as considering them in wider contexts. We practically explore items to ensure a good understanding of their properties and identification of materials.</p> <p><u>As relevant we can practice or complete an entry level NEA practical.</u></p>		<p>develop, KS3 knowledge on forces.</p> <p>Topic 2: Electricity</p> <p>The second topic we will focus on explores electricity and circuits. Electricity is a fundamental pillar of the Sciences expanding through KS3, into KS4 and beyond. We will be giving students the opportunity to identify and build upon their prior knowledge within this unit and further explore it through the use of practical activities including real life scenarios.</p>	
---	--	---	--	--	--

We are implementing a transition from AQA Combined Synergy to AQA Combined Trilogy as well as covering Entry level content. The same content will be covered but in a more suitable sequence. We are moving away from a 2 year rolling programme in to a new curriculum implementation to encourage development of skills in a sequential and supportive manner.

Year 11 Curriculum implementation: Further developing and mastering our skills and understanding in order to be a Scientist

1	2	3	4	5	6
<p>Topic 1: Introducing science AQA Trilogy WJEC/entry level. Baseline assessments.</p> <p>This initial unit introduces students to the fundamentals of our Science qualifications. Due to the limited access some of our students have experienced within this subject we complete transition test baseline assessments that will give us a better understanding as to the students current knowledge and aims. first unit so that by the end of this half term.</p> <p><u>Topic 2: Photosynthesis</u></p>	<p>Topic: Food chains and genetic development</p> <p>For the second half of the autumn term we will be focusing on Food chains/webs and genetic development. Students are given the opportunity to identify and build on their prior knowledge and start with fundamental concepts before further exploration and deepening the understanding. The concepts covered consolidate and extend learning that they will have encountered throughout KS2 and 3 whilst giving the opportunity to solidify current knowledge.</p>	<p>Topic 1: Acids and bases</p> <p>At the start of the spring term we will be looking at a unit on PH, chemical changes. Students will have the opportunity to develop their understanding on both acids and bases and use practical activities to trial different PH testing methods and identify the PH scale. We will continue to develop pupils' understanding of reactivity through applying their existing knowledge of chemical reactions to investigate order of reactivity. Pupils will construct both word and symbol equations throughout this topic and investigate reduction</p>	<p>Topic 2 : Atmosphere and pollution</p> <p>Our spring 2 topic focuses on our understanding of the earth, specifically related to atmosphere and pollution. It gives the students the opportunity to develop their knowledge of their impact on the earth/their carbon footprint, climate change and how the atmosphere has changed over time. This unit gives opportunity for a range of cross curricular links including PSHE with coverage relating to pollution and the environment, Maths via patterns and percentages, Art through scientific diagrams and English with extended</p>	<p>Topic 1: Forces</p> <p>Our first short unit in this half term encompasses the topic of forces. We look at Force, weight, work done, power and learn how to complete relevant calculations.</p> <p><u>Topic 2: Speed and braking distance</u></p> <p>A secondary unit this half term utilises and expands on the students use of formula triangles and graphing skills. Maths has a fundamental and strong link with science and this is highly apparent within this unit. During this unit students get to participate in practical experiments giving them raw data to use in</p>	<p><u>Year 11 GCSE Exams</u></p>

<p>During the first half of the autumn term the students focus on plant cells and photosynthesis. Due to the inconsistent subject access that some of our students have had previously we cover foundation aspects as to plant and animal cells and what they are made of.</p> <p>These topics build on what pupils have learnt at KS2 and offer opportunities for consolidation and extension of their existing knowledge and skill base, whilst simultaneously ensuring a solid foundation of scientific understanding that can be utilised through pupils' subsequent years of study.</p> <p>This leads in to developing a deeper understanding of cell type and similarities and differences.</p>	<p>Areas that are covered within this unit include, but are not limited to, food chains and food webs, competition and living/non-living factors, decay and the carbon-cycle, adaptation (natural and artificial selection), genetic material, alleles and genetic crosses.</p> <p>Within these areas we will look at developing knowledge and skills from assembling food webs to completing genetic crosses and identifying conclusions based on the given data and considering genetic traits.</p> <p>As part of the unit we will be developing our knowledge of relevant terminology and our ability to utilise that correctly.</p> <p><u>End of half term assessments comprise of topic specific</u></p>	<p>reactions, neutralisation reactions and indicators. This topic provides a heavy emphasis on practical skills as well as scientific literacy. Students will be able to plan practical investigations, make observations, follow instructions, balance equations, and identify risks and hazards.</p> <p>Topic 2: Chromatography</p> <p>This short practical topic/activity reflects on skills and techniques from KS2 and 3. Pupils revisit key vocabulary associated with solutions with emphasis on solubility, solvent, soluble, insoluble and solute. Students explore and discuss the uses of chromatograms and retention factors in industry, food colourings and dyes, as well as in the police force before utilising</p>	<p>writing, research and making comparisons.</p> <p>As part of this unit students have the opportunity to plan and complete practical investigations and experiments. This includes exploring how to filter water and get potable water as well as looking at different methods and tools to do so.</p> <p>Topic 2: Environmental</p> <p>The second topic we will look into will also have some links back to our metals topic due to environmental impacts.</p> <p>We will be looking at a range of real life environmental scenarios including oil spills, volcanoes, fossils, rock formation and human impact.</p> <p>We will be completing hands on activities relating to exploring</p>	<p>their calculations. The unit covers speed/braking distance, distance/time graphs, acceleration and speed/time graphs</p> <p>Topic 3: Magnetism and Electro magnetism</p> <p>This short unit develops our coverage of magnetism. We practically explore how magnets work and link this back with our Year 10 spring topic on metals.</p> <p>During this unit there are a number of practical opportunities. Students are able to map out/plot magnetic fields around a magnet.</p> <p>Using a range of visual aids such as videos we explore the different types of waves around us and develop our use of relevant terminology within measuring wave length and identifying</p>	
---	--	--	---	---	--

<p>Further to this we look in to the process of photosynthesis and types of respiration.</p> <p><u>End of half term assessments comprise of topic specific questions, entry level NEA papers and Mock/GCSE paper practise as relevant.</u></p>	<p><u>questions, entry level NEA papers and Mock/GCSE paper practise as relevant.</u></p>	<p>these factors in completing their own investigation within the context of a police investigation.</p> <p><u>End of half term assessments comprise of topic specific questions, Entry level and Mock/GCSE paper practise as relevant.</u></p>	<p>density, fossil formation, and ecological disasters. We will be considering sustainability and our own personal carbon footprints.</p> <p><u>End of half term assessments comprise of topic specific questions, Entry level papers and Mock/GCSE paper practise as relevant.</u></p>	<p>their relevant properties.</p> <p><u>Year 11 exams will start part way through this half term. Therefore opportunity will be given to catch up on any missed NEA assessments</u></p>	
---	--	--	--	--	--

Impact of our curriculum:

lessons, progress is measured through quizzes, interactive multiple choice questioning and through marking. Feedback plays a crucial role in assessing depth of student understanding and analysing other students' answers allows students to assess their own progress based upon the feedback from the teacher. Mastery is achieved through sequential learning leading to a deeper more developed understanding and regular opportunities to practice recalling key information.

Baseline assessments identify initial foundation knowledge levels and analysis of this data identifies GCSE and Entry level starting points for each student. Data from end of topic tests and mock papers are used to review topics, identify gaps and target parts of the curriculum as needed. Gaps are addressed and closed through a range of methods including revisiting topic areas through starter and plenary activities.

Engagement in Science will be evident in a strong number of students entered for GCSE or Entry level awards as relevant. Displays identify further opportunities that subject qualifications could lead to. The diverse and knowledge rich curriculum at Kickstart is designed to develop knowledge, skills, confidence and give the opportunity for students to develop in to articulate scientists who want to learn more about the world around them.

Analysis of assessment and mock data will help teachers decide which topics require intervention or extra focus in in revisitation activities; the curriculum is a two year rolling programme that covers the curriculum necessary for a double GCSE award as well as allow for sequential learning with a deepening focus building from foundation skills to emerging/mastery within each topic area

Measuring the impact of our curriculum is important to the department and we strive to get more students be successful in Science and achieve a qualification suitable to their individual progress. Each year we monitor the number of students that are enrolled within Science at entry level and GCSE level as well as the progress made by each pupil within our cohorts to identify areas of departmental focus.

Wider Curriculum offer

The following sections clarify how areas such as Personal development, Careers and Cultural Capital are woven into the intention, implementation and impact of the subject curriculum

Personal Development within our curriculum	
Personal Development	<p>Science at Kickstart Academy contributes to the school curriculum by developing pupils abilities and skills within a range of areas including problem solving, observations, investigating hypothesis and drawing relevant conclusions. We aim to support our students to develop in many diverse aspects of life and to grow as both individuals as well as part of a larger team.</p> <p>Responsible, respectful and active citizens: Through our delivery of Science, including specific aspects on environmental science, students are encouraged to develop their opinions and attitudes to topics as wide ranging as global climate change, artificial selection, carbon footprints and more. This leads in to a deeper understanding of what is needed to be a responsible, respectful and active citizen.</p> <p>Fundamental British Values:</p>

	<p>Students in Science learn about the development of medicines and the need of vaccinations and how this can be used to protect themselves and others within the world around them. British Values; Individual liberty of own views, tolerance and mutual respect of others views is taught through the topics where different views / ethics are involved. This includes the topics of genetic modification, selective breeding, stem cell research and maintaining biodiversity.</p> <p>Inclusive Environment: Science at Kickstart ensures inclusivity. Through our theoretical and practical activities, we ensure that all students have full access to a range of activities and cater for a range of learning styles. Science enables pupils to build a fuller understanding of the world in which they inhabit and the complex interactions that occur within an environment.</p> <p>Character: Within the Science curriculum students are given the opportunity to make their own observations, develop their own views and explore attitudes. We help practise extended answers to questions that fully explore our understanding and own view points. Within science there are many opportunities to work independently or as part of a team helping develop independent thought as well as ensuring that they can cooperate consistently well with others. This is a fundamental aspect of teaching and learning to prepare them for life.</p> <p>Confidence, Resilience and Mental Health: As a subject, Science presents numerous opportunities for developing knowledge and creativity in the use of observational descriptive language, practical activities and diagrams as well as the independent approaches to investigations. Being able to complete new and interesting activities and experiments can stimulate a sense of achievement and wonder when a Scientific theory is understood and observed. Students are encouraged to build their self confidence and give activities a go, through staff and peer support we aim to build confidence and resilience within the young scientists around us.</p> <p>Careers and Readiness For Next Phase Of Education: Science is an important aspect for understanding the world around us; it has a multitude of cross-curricular links in both knowledge and skill in areas such as Mathematic, Humanities and Technology and many more. It is also important aspect in everyday life, in many forms of employment, and in public decision-making. Many scientists utilise the skills they have developed within Science in many aspects of their life both at home and within further education/careers.</p>
SMSC	<p>Cultural:</p> <p>Spiritual: Both the natural and technological world and everything within it is at the natural heart of Science. Our studies on the world around us and how continues to develop and change shows the wonders around us as well as helps to develop our sense of spiritual</p>

	<p>and moral responsibility. Making new discoveries increases our sense of awe and wonder at the complexities and elegance of the natural world. For scientists, this is a spiritual experience and drives us onwards in our search for understanding.</p> <p>Moral: Science naturally has many moral areas that are considered specifically within areas of the curriculum. From indepth discussions and debates on natural/artificial selection, vaccine dispersal, renewable energy sources, global warning and more. Scientists are encouraged to learn about these areas and develop their own opinions and attitudes related to them.</p> <p>Social: Students are strongly encouraged to debate and discuss their opinions with others as well as to develop their interaction and social skills. We work both independently and within teams and through indepth looks in to topics related to the world around us encourage students to become aware of their sense of identity, community and place in the world.</p> <p>Cultural: Through our studies of scientific developments, global/historical scientists of import and more we support students to gain a better understanding of their own sense of place and space. We foster knowledge, tolerance and understanding and help to encourage social cohesion locally and globally.</p>
<p>Extra-Curricular & Enrichment</p>	<p>We enjoy a limited range of enrichment opportunities in Science and we are always looking for new ways to enhance our classroom learning.</p> <p>Current enrichment opportunities:</p> <ul style="list-style-type: none"> • Home cooking qualification – cooking encompasses a wide range of science related learning. • Previous utilisation of microscopes at Telford college • Occasional STEM activity days – E.g. looking at where does maths apply in the real world <p>Future enrichment opportunities we plan to develop:</p> <ul style="list-style-type: none"> • Science specific Enrichment trip • Further development of fieldwork opportunities • further development of links with industry
<p>Careers/Work Experience</p>	
<p>Careers</p>	
<p>Work Experience Offer &</p>	<p>Students: Within Kickstart students are encouraged to take part in vocational and work experience opportunities. We work alongside other providers to encourage development of relevant skills and knowledge that can support our students in their future careers.</p>

<p>Staff Work Experience</p>	<p>Staff: Staff have the opportunities to attend CPD and work collaboratively with other schools to develop their own knowledge and understanding both within their specific subject area and within wider health, school and community related areas.</p>
<p>Cultural Capital</p>	
<p>Ofsted Definition</p>	<p><i>It is the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.</i></p> <p>Cultural Capital is encouraged in science through regular reference to scientific achievements and scientists of the past, referring to new and modern discoveries and showing relevant news reports linking to scientific improvements in modern life and technology.</p>