

CITY OF  
ROCHESTER



SCHOOL

# **City of Rochester School Experiential Curriculum**

# Experiential Curriculum

## Key Stage 1 – 4

### Intent

A large part of our curriculum is experiential, designed to support and complement our whole curriculum. The experiential curriculum has been chosen as it is important for children on the autism spectrum to be able to make cohesive links that are not abstract. Our intent is that the experiential curriculum:

- supports students to access learning in all areas of the curriculum
- develops the individual cultural capital of each student
- help students to engage in learning when they are unable to access other areas of the curriculum
- encourage students to view education and learning as a lifelong pursuit
- help students to develop skills for learning
- help students develop independent living skills
- help students develop skills for work
- supports students to fully access their community
- to support students who are identified as high achievers
- encourage creativity and enthusiasm and to help students develop interests and passions
- to develop and build the ideas of risk management and risk benefit

### Implementation

- Each term is built around a 'school' which forms the basis of the experiential curriculum for that term. e.g. farm school, film school.
- Links with external providers are made and a list of curriculum objectives and aims provided which are then used to come up with a proposal for the 'school.' The school runs in two separate groups; primary and secondary.
- The pupils then spend at least one afternoon a week either onsite or offsite working on the experiential curriculum. For example, during term 1 the children attended farm school. During the term they learned about where their food comes from, learned about weather systems and the effect on food, picked vegetables from the farm and made soup, learned about animal husbandry, including care, feeding and the food chain. This has strong links with not only Science but PSHE, Maths, English and Geography. At school they created a large-scale map of the farm out of cardboard and paint which enabled them to link it with Art.
- Underpinning everything about the experiential curriculum is that it is hands on, fully immersive and highly practical for pupils

## Impact

- The impact of our experiential curriculum is evident across all areas of school life.
- We conduct impact studies after each 'school' which demonstrate amongst others that:
  - Pupils are happy at school and feel safe, nurtured and cared for. They want to come to school to attend the different 'schools' and attendance is good.
  - The children and staff are proud of the school and all that we achieve together as a team.
  - Visitors and prospective parents consistently comment on the atmosphere, ethos and environment the school team have created.
  - The school's core value of Confidence, Resilience and Success are seen through the way children act and conduct themselves in school.
  - All children are making progress from their starting points, which is recognized in small steps through positive feedback and recognition using the school's rewards policy.
  - As children grow in confidence in their abilities, they are beginning to understand, assess and manage their own risk and safety. This is allowing them to become more independent and show them that life comes with not only risk but also rewards.

# Curriculum Overview

- \* Our curriculum is designed with our children in mind but is subject to change. Units may be moved around to suit children’s interests, current affairs and to make better use of resources. If this happens staff ensure that there is breadth and balance across the year to ensure coverage.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>All Years</b>	Farm School – Kent Life	Film School – Chocolate Film Company	Horse School – Squirrels Riding School	Robot School – Programming and Coding	Nature and Wildlife School – through Photography	Forest School – Shorne Wood Country park

	Term 1
<b>Farm school</b>	Farm School will run for a 6-week block where pupils from KS1 to KS3 (optional at KS4) will have the opportunity to attend Kent Life farm. The aim is for pupils to engage with the natural world and to understand farming and its importance to international, national and rural economies. All pupils will gain an understanding of food safety and security, elementary animal husbandry, crops and climate change, caring for and protecting the countryside as well as working with animals. The emphasis is on practical skills and knowledge acquisition in relation to how farming affects all our lives. There are clear links to the curriculum being taught within school. In primary science all classes are studying animals including humans for the same period that farm school is running; the farm school curriculum ties in with the students learning of nutrition and how food is grown; types of teeth, a comparison between carnivore and herbivore and food chains. Within the secondary school students are studying reproduction in biology, and the farm school offers an excellent basic introduction to animal husbandry to launch this unit. Additionally, the students are beginning a BTEC in home cooking and the skills learnt cooking and preparing food at farm school will assist them in their studies at school.

	Term 2
<b>Film school</b>	This will run for a 6-week block where pupils in KS1 and KS2 will collaborate on creating animated films. They will work on creating characters, developing storytelling skills, learn the technical aspects of film making as well as developing a range of life skills. Pupils will take their creativity, imagination and skills to the next level. Pupils in KS3 –KS5 will also participate in Film School and these year groups will write, develop, feature and create documentaries that link to key issues that affect young people today. Our aim is to build a new, diverse generation of filmmakers! Within the primary school curriculum there are clear links through the processes of character creation, writing of fiction and storytelling. These skills will be honed during the film school sessions to enable the students to create an interesting animated film. Within the Year 4 science curriculum the children will be studying sound during the same term as film school. The process of recording sound is explored during film school and ties in with their learning in science. Within the secondary school the creation of a documentary piece will be supported by their nonfiction writing in English lessons. The students’ will develop their speaking and listening skills through the recording and presenting of their documentary. The documentary is to be based around a topic that affects young people today, this ties in with the strong SMSC learning ethos the school harbours and has clear links to the secondary students’ PSHE lessons.

	Term 3
<b>Horse school</b>	This curriculum offer works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility and Personal achievement. The framework of activity is called the BHS Achieve Award and includes 10 stable management awards and six riding awards. There are also a range of BHS Achieve Skills. The BHS Achieve Skills are activities that can be carried out in the wider equestrian environment, such as wildlife awareness, photography or fix it awards. The horse riding within this program is a clear progression from the balance and coordination PE units studied within the primary curriculum. Students will learn to use and build upon the skills they learn during their PE lessons. The focus for the entire Changing Lives through Horses Programme is on communication and confidence. Improvements in these qualities will be beneficial for our students across the entire school-based curriculum.

	<b>Term 4</b>
<b>Robotics school</b>	Marty the Robot will form part of our STEM curriculum. Marty makes learning about programming and engineering a fun and engaging process. Marty acts as a gateway into computer sciences and can grow with pupils from early education to their senior phase. By empowering pupils, Marty allows for inventive learning, engaging pupils' creativity and learning key STEM skills. Programming and coding are covered within City of Rochester School's ICT curriculum for primary and secondary students. These skills will be used within the robotics programme. Furthermore, coding has elements of maths from basic directions to complicated uses of algebra, teachers will use the Marty the Robot sessions to show real world examples of the uses of maths. This enables students to understand the importance of maths and its further applications.

	<b>Term 5</b>
<b>Nature and Wildlife school (through photography)</b>	This curriculum offer engages pupils in ecosystems through visits to nature reserves, wetlands and coastal sanctuaries. Children who are connected to nature are happier, healthier and more creative. Pupils will take advantage of the many nature and wildlife opportunities available across Medway and Kent, learning about bird and animal life, plants and trees, rivers and oceans. Protecting and enhancing the natural world will be a feature of this programme to enable pupils to develop a lifelong love of nature and how it is the foundation of our wellbeing and prosperity. Photography is a skill that is included in the City of Rochester School curriculum and taught within secondary art lessons. This experiential curriculum offering has clear links to the science curriculum across primary and secondary classes. Within each primary year the students are studying animals including humans, living things and their environment and then at least one further biology unit. Class teachers will use the nature and wildlife school sessions as reference points to base their science lessons on to further the students learning and demonstrating biological concepts in a real-world setting. Within the secondary school there is a strong focus on biology within science and some of the necessary biology practical's will be conducted during these sessions, including sampling of animals and plants.

	<b>Term 6</b>
<b>Forest school</b>	<p>Forest School (FS) will run for a 6-week block during the year where pupils from KS1 –KS3(optional at KS4) engage in learning opportunities to achieve and develop confidence and self-esteem through hands-on learning experiences in a woodland and other natural environment with trees.</p> <ul style="list-style-type: none"> <li>• FS is a specialised learning approach that sits within and complements the wider context of outdoor and woodland education.</li> <li>• FS is a long-term process of regular sessions, rather than a one-off or infrequent visit; the cycle of planning, observation, adaptation and review links each session.</li> <li>• FS takes place in a woodland or natural environment to support the development of a relationship between the learner and the natural world.</li> <li>• FS uses a range of learner-centred processes to create a community for being, development and learning.</li> <li>• FS aims to promote the holistic development of all those involved, fostering resilient, confident, independent and creative learners.</li> <li>• FS offers learners the opportunity to take supported risks appropriate to the environment and to themselves.</li> <li>• FS is run by qualified Forest School practitioners, supported by teaching and support staff from the school, who continuously maintain and develop their professional practice.</li> </ul> <p>Forest school offers our students an opportunity to develop their team work and communication skills within a natural environment. The qualities that they develop whilst enjoying these sessions are used across the curriculum when back in school. The links to nature that are fostered during the forest school sessions are brought back into the classroom during science lessons across the primary and secondary schools. Furthermore, forest school gives the students experience with using basic tools and cooking on a camp fire. These are skills that will be essential for the students that are undertaking their Duke of Edinburgh award with City of Rochester School.</p>

# Detailed Curriculum Map

## Farm School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<ul style="list-style-type: none"> <li>• To understand that some of our foods come from a farm and recognise some of the animals.</li> <li>• To know that animals need food and water and provide these with support.</li> <li>• To know that plants need water in order to be healthy. To think about seasons on the farm.</li> <li>• With high levels of adult support, to pick some crops and make them into soup.</li> <li>• To taste different crops and think about which they like and which they don't.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - identify and name a variety of common animals, identify and name a variety of common wild and garden plants, observe changes across the 4 seasons</li> <li>• DT - use the basic principles of a healthy and varied diet to prepare dishes, understand where food comes from.</li> </ul>
2	<ul style="list-style-type: none"> <li>• To understand that some of our foods come from a farm and recognise some of the animals and plants that are there.</li> <li>• To be aware of some of the basic needs of animals and provide these with support.</li> <li>• To know that crops need water in order to be healthy, and that crops grow from seeds and bulbs.</li> <li>• With high levels of adult support, to pick some crops and make them into soup.</li> <li>• To notice that different crops look different and taste different.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - describe how different habitats provide for the basic needs of different kinds of animals and plants, identify and name a variety of plants and animals, observe and describe how seeds and bulbs grow into mature plants, find out and describe how plants need water, light and a suitable temperature to grow and stay healthy, find out about and describe the basic needs of animals</li> <li>• DT - use the basic principles of a healthy and varied diet to prepare dishes, understand where food comes from.</li> </ul>

3	<ul style="list-style-type: none"> <li>To understand that some of our foods come from a farm and recognise some of the animals and plants that are there.</li> <li>To name some foods that cannot be farmed and consider reasons why.</li> <li>To be aware of the basic needs of animals and provide these with support.</li> <li>To know that crops need water in order to be healthy, and consider what may happen if they were deprived of water.</li> <li>With high levels of adult support, to pick some crops and make them into soup.</li> <li>To notice that different crops look different and taste different and discuss reasons why this might be.</li> </ul>	<ul style="list-style-type: none"> <li>Science - explore the requirements of plants for life and growth and how they vary from plant to plant, identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food.</li> <li>DT - understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>
4	<ul style="list-style-type: none"> <li>To understand that some of our foods come from a farm, but some are not able to be farmed.</li> <li>To recognise the animals and plants that are there and consider the product they make.</li> <li>To know the basic needs of animals and provide these with limited support.</li> <li>To know that crops need water and protection from pests in order to be healthy, and consider what may happen if they were deprived of water.</li> <li>With some adult support, to pick some crops and make them into soup. To notice that different species of the same crop look different and taste different and discuss reasons why this might be, including human preference.</li> </ul>	<ul style="list-style-type: none"> <li>Science - recognise that living things can be grouped in a variety of ways, identify and name a variety of living things, recognise that environments can change and that this can sometimes pose dangers to living things</li> <li>DT - understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>
5	<ul style="list-style-type: none"> <li>To name the animals and crops and discuss the reasons for farming them.</li> <li>To know the basic needs of different animals and provide these with limited support.</li> <li>To compare the life cycles of mammals and birds on the farm.</li> <li>To know that crops need water and protection from pests and diseases, and consider ways to keep the crops healthy.</li> <li>To pick some crops and make them into soup with supervision.</li> <li>To notice that different species of the same crop look different and taste different and discuss reasons why this might be, including human preference and product yield.</li> </ul>	<ul style="list-style-type: none"> <li>Science - describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird, describe the life process of reproduction in some plants and animals</li> <li>DT - understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>
6	<ul style="list-style-type: none"> <li>To name the animals and crops and classify them into different groups.</li> <li>To know the basic needs of animals and provide these, and consider any additional needs, including vaccinations.</li> <li>To know that crops need water and protection from pests and diseases, and consider ways to keep the crops healthy.</li> <li>To pick some crops and make them into soup with supervision.</li> <li>To notice that different species of the same crop look different and taste different and discuss reasons why this might be, including human preference, product yield and disease resistance.</li> </ul>	<ul style="list-style-type: none"> <li>Science - describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, give reasons for classifying plants and animals based on specific characteristics, recognise the impact of diet, exercise, drugs and lifestyle on the way animals' bodies function</li> <li>DT - understand and apply the principles of a healthy and varied diet, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul>

7	<ul style="list-style-type: none"> <li>• To consider the importance of farming to food production, to discuss which foods from their diet are farmed and the health benefits of them.</li> <li>• To know the needs of different farm animals and provide these.</li> <li>• To be aware of the needs of crops and how to increase yields.</li> <li>• To consider how climate change is affecting the harvest and leaving species less well adapted.</li> <li>• To realise there is variation between species and think of reasons why.</li> <li>• To choose crops that are in season and ready to pick and make a soup from them.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms, the variation between species and between individuals of the same species meaning some organisms compete more successfully, which can drive natural selection, changes in the environment which may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction.</li> <li>• DT - understand and apply the principles of nutrition and health, cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet, understand the source, seasonality and characteristics of a broad range of ingredients.</li> </ul>
8	<ul style="list-style-type: none"> <li>• To consider the importance of farming to food production, to discuss which foods from their diet are farmed.</li> <li>• To know the needs of different farm animals and provide these.</li> <li>• To be aware of the needs of crops, including the importance of insect pollination for food security.</li> <li>• To consider how climate change is affecting the harvest.</li> <li>• To realise there is variation between species and think of reasons why, including human preference. To choose crops that are in season and ready to pick and make a soup from them.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - the content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed, calculations of energy requirements in a healthy daily diet, the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases, the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops, the importance of plant reproduction through insect pollination in human food security, how organisms affect, and are affected by, their environment.</li> <li>• DT - understand and apply the principles of nutrition and health, cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet, understand the source, seasonality and characteristics of a broad range of ingredients.</li> </ul>
9	<ul style="list-style-type: none"> <li>• To know the importance of farming to food production and its effects on our economy.</li> <li>• To know the needs of different farm animals and provide these, and consider possible differences between caring for mammals and caring for poultry.</li> <li>• To know the needs of crops and link these to photosynthesis and consider the adaptations of the plants.</li> <li>• To consider how climate change is affecting the harvest and generate ideas to help.</li> <li>• To know crop variation is important for disease resistance.</li> <li>• To choose crops that are in season and ready to pick and make a soup from them.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - plants making carbohydrates in their leaves by photosynthesis and gaining mineral nutrients and water from the soil via their roots, the dependence of almost all life on Earth on the ability of photosynthetic organisms, such as plants and algae, to use sunlight in photosynthesis to build organic molecules that are an essential energy store and to maintain levels of oxygen and carbon dioxide in the atmosphere, the adaptations of leaves for photosynthesis.</li> <li>• DT - understand and apply the principles of nutrition and health, cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet, understand the source, seasonality and characteristics of a broad range of ingredients.</li> </ul>

10	<ul style="list-style-type: none"> <li>• To consider the importance of farming to the rural economy.</li> <li>• To have a basic understanding of animal husbandry and to use this practically.</li> <li>• To consider ways to reduce disease within animals and plants on the farm.</li> <li>• To know the importance of photosynthesis for crop production.</li> <li>• To know that climate change affects farms and think of suggestions to counter this.</li> <li>• To know that intraspecific genetic variation is important for crop survival and consider how the variation has occurred.</li> <li>• To know the importance of protecting our countryside and ways this can be achieved.</li> <li>• To use the seasonal crops available to design and produce a recipe of their own.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - bacteria, viruses and fungi as pathogens in animals and plants, reducing and preventing the spread of infectious diseases in animals and plants, photosynthesis as the key process for food production and therefore biomass for life, the process of photosynthesis, factors affecting the rate of photosynthesis, genetic variation in populations of a species, the process of natural selection leading to evolution, the importance of selective breeding of plants and animals in agriculture.</li> <li>• BTEC Home Cooking - the knowledge, understanding and confidence to cook meals at home, an ability to transfer skills learned to different recipes.</li> </ul>
11	<ul style="list-style-type: none"> <li>• To consider the importance of farming to the rural economy and how this affects the national economy.</li> <li>• To have an understanding of animal husbandry and to use this practically.</li> <li>• To consider how natural selection and selective breeding have resulted in the animals and plants seen on the farm.</li> <li>• To know that climate change affects farms and think of feasible suggestions to counter this.</li> <li>• To know the importance of protecting our countryside and ways this can be achieved.</li> <li>• To use the seasonal crops available to design and produce a recipe of their own and nutritionally analyse their product.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - evolution occurs by the process of natural selection and accounts both for biodiversity and how organisms are all related to varying degrees, the process of natural selection leading to evolution, the importance of selective breeding of plants and animals in agriculture.</li> <li>• BTEC Home Cooking - the knowledge, understanding and confidence to cook meals at home, an ability to transfer skills learned to different recipes.</li> </ul>

# Film School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film with support.</li> <li>• Make clay, card, Lego etc. models for filming with support.</li> <li>• Use hardware to film animations with support.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - use technology purposefully to create, organise, store, manipulate and retrieve digital content; recognise common uses of information technology beyond school</li> <li>• DT - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul>
2	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film with support.</li> <li>• Make clay, card, Lego etc. models for filming.</li> <li>• Use hardware to film animations with support.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - use technology purposefully to create, organise, store, manipulate and retrieve digital content; recognise common uses of information technology beyond school</li> <li>• DT - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul>

3	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film.</li> <li>• Make clay, card, lego etc. models for filming.</li> <li>• Use hardware to film animations with support.</li> <li>• Using software to edit animations with support.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately; select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>
4	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film.</li> <li>• Make clay, card, lego etc. models for filming.</li> <li>• Use hardware to film animations.</li> <li>• Using software to edit animations with support.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately; select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>
5	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film.</li> <li>• Make clay, card, lego etc. models for filming.</li> <li>• Use hardware to film animations.</li> <li>• Using software to edit animations with little support.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately; select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>
6	<ul style="list-style-type: none"> <li>• Animate a short story 30 seconds long.</li> <li>• Design a storyboard for a film.</li> <li>• Make clay, card, lego etc. models for filming.</li> <li>• Use hardware to film animations, independently.</li> <li>• Using software to edit animations, independently.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately; select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>

7	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of different shot sizes.</li> <li>• Demonstrate use of different hardware e.g. cameras, sound mics etc.</li> <li>• Design a storyboard for a film.</li> <li>• Understand different interview techniques.</li> <li>• Be able to evaluate filming techniques.</li> <li>• Use hardware to film.</li> <li>• Using software to edit film.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users; create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</li> </ul>
8	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of different shot sizes.</li> <li>• Demonstrate use of different hardware e.g. cameras, sound mics etc.</li> <li>• Design a storyboard for a film.</li> <li>• Understand different interview techniques.</li> <li>• Be able to evaluate filming techniques.</li> <li>• Use hardware to film.</li> <li>• Using software to edit film.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users; create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</li> </ul>
9	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of different shot sizes.</li> <li>• Demonstrate use of different hardware e.g. cameras, sound mics etc.</li> <li>• Design a storyboard for a film.</li> <li>• Understand different interview techniques.</li> <li>• Be able to evaluate filming techniques.</li> <li>• Use hardware to film.</li> <li>• Using software to edit film.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users; create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</li> </ul>
10	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of different shot sizes.</li> <li>• Demonstrate use of different hardware e.g. cameras, sound mics etc.</li> <li>• Design a storyboard for a film.</li> <li>• Understand different interview techniques.</li> <li>• Be able to evaluate filming techniques.</li> <li>• Use hardware to film.</li> <li>• Using software to edit film.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - develop their capability, creativity and knowledge in computer science, digital media and information technology; develop and apply their analytic, problem-solving, design, and computational thinking skills</li> </ul>
11 12 13	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of different shot sizes.</li> <li>• Demonstrate use of different hardware e.g. cameras, sound mics etc.</li> <li>• Design a storyboard for a film.</li> <li>• Understand different interview techniques.</li> <li>• Be able to evaluate filming techniques.</li> <li>• Use hardware to film.</li> <li>• Using software to edit film.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - develop their capability, creativity and knowledge in computer science, digital media and information technology; develop and apply their analytic, problem-solving, design, and computational thinking skills</li> </ul>

# Horse School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<p>BHS Stable Management Achieve Award 1</p> <ul style="list-style-type: none"> <li>• To make friends with a horse.</li> <li>• To groom a horse with a body brush.</li> <li>• To name four different colours of horse.</li> <li>• To give a horse a bucket feed.</li> </ul> <p>BHS Rider Achieve Award 1</p> <ul style="list-style-type: none"> <li>• To mount a horse from a block.</li> <li>• To hold the reins.</li> <li>• To ask a horse to walk on. To dismount a horse correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
2	<p>BHS Stable Management Achieve Award 2</p> <ul style="list-style-type: none"> <li>• To put on a headcollar.</li> <li>• To pick out feet.</li> <li>• To tidy a stable.</li> <li>• To know the different markings.</li> </ul> <p>BHS Rider Achieve Award 1</p> <ul style="list-style-type: none"> <li>• To mount a horse from a block.</li> <li>• To hold the reins.</li> <li>• To ask a horse to walk on.</li> <li>• To dismount a horse correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>

3	<p>BHS Stable Management Achieve Award 3</p> <ul style="list-style-type: none"> <li>• To lead a horse at walk.</li> <li>• To groom the mane and tail.</li> <li>• To know the points of the horse.</li> <li>• To check and refill water and hay.</li> </ul> <p>BHS Rider Achieve Award 2</p> <ul style="list-style-type: none"> <li>• To adjust the rein length.</li> <li>• To be able to tell if the girth is too loose or too tight.</li> <li>• To be able to position feet in the stirrups.</li> <li>• To ask a horse to halt.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
4	<p>BHS Stable Management Achieve Award 4</p> <ul style="list-style-type: none"> <li>• To muck out.</li> <li>• To tie up a horse.</li> <li>• To know the breeds of horse.</li> <li>• To know more about grooming.</li> </ul> <p>BHS Rider Achieve Award 2</p> <ul style="list-style-type: none"> <li>• To adjust the rein length.</li> <li>• To be able to tell if the girth is too loose or too tight.</li> <li>• To be able to position feet in the stirrups.</li> <li>• To ask a horse to halt.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
5	<p>BHS Stable Management Achieve Award 5</p> <ul style="list-style-type: none"> <li>• To understand horse behaviour and expressions.</li> <li>• To turn a horse out.</li> <li>• To catch a horse from the field and lead in.</li> <li>• To plait a tail.</li> </ul> <p>BHS Rider Achieve Award 3</p> <ul style="list-style-type: none"> <li>• To help with adjusting the girth.</li> <li>• To stand up in halt and find balance.</li> <li>• To be able to tell if the stirrups are the right length.</li> <li>• To ask your horse to turn left or right.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
6	<p>BHS Stable Management Achieve Award 6</p> <ul style="list-style-type: none"> <li>• To catch a horse in the field and lead in.</li> <li>• To plait a tail.</li> <li>• To identify three different types of bedding.</li> <li>• To name five signs of health in a horse.</li> </ul> <p>BHS Rider Achieve Award 3</p> <ul style="list-style-type: none"> <li>• To help with adjusting the girth.</li> <li>• To stand up in halt and find balance.</li> <li>• To be able to tell if the stirrups are the right length.</li> <li>• To ask your horse to turn left or right.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>

7	<p>BHS Stable Management Achieve Award 7</p> <ul style="list-style-type: none"> <li>• To prepare a horse for a show.</li> <li>• To lead a horse in trot.</li> <li>• To prepare a feed for a horse.</li> <li>• To know how to reward and correct a horse.</li> </ul> <p>BHS Rider Achieve Award 4</p> <ul style="list-style-type: none"> <li>• To help adjust the stirrups.</li> <li>• To ride a simple change of rein.</li> <li>• To stand up in walk and find balance.</li> <li>• To ask a horse to trot.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
8	<p>BHS Stable Management Achieve Award 8</p> <ul style="list-style-type: none"> <li>• To put on and take off a rug.</li> <li>• To identify feedstuffs. To do a field check.</li> <li>• To move the horse around you.</li> </ul> <p>BHS Rider Achieve Award 4</p> <ul style="list-style-type: none"> <li>• To help adjust the stirrups.</li> <li>• To ride a simple change of rein.</li> <li>• To stand up in walk and find balance.</li> <li>• To ask a horse to trot.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
9	<p>BHS Stable Management Achieve Award 9</p> <ul style="list-style-type: none"> <li>• To navigate a horse through different obstacles.</li> <li>• To use a feed chart.</li> <li>• To know how to put on and take off boots.</li> <li>• To know when to call the vet.</li> </ul> <p>BHS Rider Achieve Award 5</p> <ul style="list-style-type: none"> <li>• To steer through cones or markers.</li> <li>• To trot for a minimum of a long side.</li> <li>• To halt at a named point.</li> <li>• To put a saddle on and take it off.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>

10	<p>BHS Stable Management Achieve Award 10</p> <ul style="list-style-type: none"> <li>• To complete a horse agility course.</li> <li>• To present a horse for a show.</li> <li>• To handle and trot up a horse in the ring.</li> </ul> <p>BHS Rider Achieve Award 5</p> <ul style="list-style-type: none"> <li>• To steer through cones or markers.</li> <li>• To trot for a minimum of a long side.</li> <li>• To halt at a named point.</li> <li>• To put a saddle on and take it off.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>
11 12 13	<p>Stable Management</p> <ul style="list-style-type: none"> <li>• To apply all previous learning and assist with the care of the horses.</li> </ul> <p>BHS Rider Achieve Award 6</p> <ul style="list-style-type: none"> <li>• To ride a 20m circle.</li> <li>• To navigate a simple pattern of obstacles.</li> <li>• To do rising trot.</li> <li>• To put on a bridle and take it off.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme works to develop six key life skills through equestrian activity: Communication, Confidence, Relationships, Teamwork, Responsibility, Personal Achievement.</li> <li>• The skills developed through the programme meet the requirements of ongoing education and training, employers and participants.</li> </ul>

# Robotics School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<p>Introduction to Marty and Scratch:</p> <ul style="list-style-type: none"> <li>Learners with very little or no programming experience will be introduced to a block-based programming language where they will have the opportunity to create their own programs that can run on Marty.</li> <li>By the end of the school, learners will have an understanding of how to use the Scratch interface and will be able to create small programs to get Marty moving, exploring what kind of movements we can program Marty to do, with adult support.</li> </ul>	<ul style="list-style-type: none"> <li>Computing - understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions, create and debug simple programs, use logical reasoning to predict the behaviour of simple program</li> <li>DT - Design purposeful, functional, appealing products for themselves and other users based on design criteria, Generate, develop, model and communicate their ideas through talking, drawing, templates, mock -ups and, where appropriate, information and communication technology, Evaluate their ideas and products against design criteria, Explore and evaluate a range of existing products</li> </ul>
2	<p>Introduction to Marty and Scratch:</p> <ul style="list-style-type: none"> <li>Learners with very little or no programming experience will be introduced to a block-based programming language where they will have the opportunity to create their own programs that can run on Marty.</li> <li>By the end of the school, learners will have a solid understanding of how to use the Scratch interface and will be able to create small programs to get Marty moving, exploring what kind of movements we can program Marty to do.</li> </ul>	<ul style="list-style-type: none"> <li>Computing - understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions, create and debug simple programs, use logical reasoning to predict the behaviour of simple program</li> <li>DT - Design purposeful, functional, appealing products for themselves and other users based on design criteria, Generate, develop, model and communicate their ideas through talking, drawing, templates, mock -ups and, where appropriate, information and communication technology, Evaluate their ideas and products against design criteria, Explore and evaluate a range of existing products</li> </ul>

3	<p>Programming Concepts 1:</p> <ul style="list-style-type: none"> <li>• Begin to introduce learners to different programming concepts that will allow for more sophisticated programs to be created in terms of how we control Marty, make decisions and respond to different values. By the end of the school, learners will have a basic understanding of some basic concepts including loops, events, parallel programming, variables and if statements. They will also be able to use these concepts to program Marty in different ways, such as to create a remote control program.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts, use sequence, selection, and repetition in programs; work with variables and various forms of input and output, use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>• DT - Design purposeful, functional, appealing products for themselves and other users based on design criteria, Generate, develop, model and communicate their ideas through talking, drawing, templates, mock -ups and, where appropriate, information and communication technology</li> </ul>
4	<p>Programming Concepts 2:</p> <ul style="list-style-type: none"> <li>• Introduce learners to different programming concepts that will allow for more sophisticated programs to be created in terms of how we control Marty, make decisions and respond to different values. By the end of the school, learners will be able to build programs using more complicated if statements and logical operators (AND, OR and NOT), use functions with parameters and consider the environment that robots work in so that they can design an obstacle course for Marty.</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts, use sequence, selection, and repetition in programs; work with variables and various forms of input and output, use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>• DT - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work, investigate and analyse a range of existing products</li> </ul>
5	<p>Responding to our Environment:</p> <ul style="list-style-type: none"> <li>• Students will start to explore different sensors that can be used to help Marty to monitor and respond to different things happening in his environment. Using Scratch, students will undertake a number of small projects including programs to give Marty a secret handshake, tackle an obstacle using just logic and bump switches and also create a small game where Marty's movements are how the user will control the sprite on the screen!</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts, use sequence, selection, and repetition in programs; work with variables and various forms of input and output, use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs, use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content, select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>
6	<p>Marty and the Micro:Bit:</p> <ul style="list-style-type: none"> <li>• Learners will be introduced to the BBC Micro:Bit in this lesson pack as a device that we can program for use alongside Marty the Robot. This pack has a focus on project based learning where students will build and develop a new project or game focusing on different features and functionalities of either Marty or the Micro:Bit. Using the Scratch 3 interface, students will see how different devices can interact and communicate with each other</li> </ul>	<ul style="list-style-type: none"> <li>• Computing - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts, use sequence, selection, and repetition in programs; work with variables and various forms of input and output, use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs, select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>• DT - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work, investigate and analyse a range of existing products</li> </ul>

7	<p>Moving from Scratch to Python:</p> <ul style="list-style-type: none"> <li>Learners who have mostly had experience with Scratch will begin to explore moving from block-based programming to text-based programming. By the end of the school, students will begin to feel more comfortable programming with Python, drawing from their experiences from using Scratch. Students will be able to test commands directly in the Python shell as well as create Python scripts that they can save and run using IDLE.</li> </ul>	<ul style="list-style-type: none"> <li>Computing - Design, use and evaluate computational abstractions that model the state and behaviour or real-world problems and physical systems, Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem, Use two or more programming languages, at least one of them is textual, to solve a variety of computational problems; make use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions</li> <li>DT - identify and solve their own design problems and understand how to reformulate problems given to them, Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>
8	<p>Introduction to Marty Python:</p> <ul style="list-style-type: none"> <li>Learners with experience in block-based languages begin to build up confidence with a textual programming language. In this pack, learners will start to consider the movements that our robot makes whilst taking into account what impacts the environment has on this.</li> </ul>	<ul style="list-style-type: none"> <li>Computing - Design, use and evaluate computational abstractions that model the state and behaviour or real-world problems and physical systems, Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems, Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goal, including collecting and analysing data and meeting the needs of known users</li> <li>DT - Identify and solve their own design problems and understand how to reformulate problems given to them, Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations, Use a variety of approaches [for example, biomimicry and user centred design], to generate creative ideas and avoid stereotypical responses, Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools, Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>

<p>9</p>	<p>Decision Making in Python:</p> <ul style="list-style-type: none"> <li>Students will continue to explore Python with Marty the Robot to create their own chatbot that works in conjunction with Marty. After exploring example chatbots online, students will be able to discuss what attributes make for a better experience whilst interacting with a chatbot and considering different applications of chatbots in society. Students will be introduced to if statements, logic operators and string manipulation to design and develop their own chatbot that takes input from the user to decide what movement and reactions Marty will have.</li> </ul>	<ul style="list-style-type: none"> <li>Computing - Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems, Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems, Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goal, including collecting and analysing data and meeting the needs of known users</li> <li>DT - Identify and solve their own design problems and understand how to reformulate problems given to them, Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations, Use a variety of approaches [for example, biomimicry and user centred design], to generate creative ideas and avoid stereotypical responses, Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools, Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>
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10	Getting Loopy with Python:	• Coming Soon
11	• Get to grips with using loops to control Marty's actions.	
12		
13		

# Nature and Wildlife School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<ul style="list-style-type: none"> <li>• To visit different natural habitats and see a range of animals and plants within these environments. To discuss basic rules for visiting these areas and protecting them.</li> <li>• To use a camera with support to take photos of what they see and dictate basic labels for an adult to add to their photos to record their visits in a scrapbook.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - describe and compare the structure of a variety of common animals</li> <li>• IT - recognise common uses of information technology beyond school</li> </ul>
2	<ul style="list-style-type: none"> <li>• To visit different natural habitats and see a range of animals and plants within these environments. To discuss basic rules for visiting these areas and protecting them.</li> <li>• To use a camera to take photos of what they see and add basic labels to record their visits in a scrapbook.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</li> <li>• IT - recognise common uses of information technology beyond school</li> </ul>

3	<ul style="list-style-type: none"> <li>To note differences in the natural habitats they visit and discuss how the animals and plants within these environments differ. To think of some basic rules for visiting these areas and ways that humans can protect them for the wildlife there.</li> <li>To use a camera to take photos, including the zoom feature. Add labels and short descriptions to their photos to record their visits in a scrapbook.</li> </ul>	<ul style="list-style-type: none"> <li>Science - identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers, explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</li> <li>IT - select, use and combine a variety of software on a range of digital devices, including collecting, analysing, evaluating and presenting data and information</li> <li>PSHE - Being a global citizen, being aware of how my choices affect others</li> </ul>
4	<ul style="list-style-type: none"> <li>To note differences in the natural habitats they visit and discuss how the animals and plants within these environments differ. To consider how the animals are suited to the environment. To record some food chains from the ecosystems. To think of some rules for visiting these areas and ways that humans can protect them for the wildlife there. To record these in a poster form in their scrapbooks.</li> <li>To use a camera to take photos, including the zoom feature. To view their photos on the camera and delete any they do not want. Add labels and short descriptions to their photos to record their visits in a scrapbook. To draw simple diagrams of the organisms they see.</li> </ul>	<ul style="list-style-type: none"> <li>Science - recognise that environments can change and that this can sometimes pose dangers to living things, construct and interpret a variety of food chains, identifying producers, predators and prey</li> <li>IT - select, use and combine a variety of software on a range of digital devices, including collecting, analysing, evaluating and presenting data and information.</li> </ul>
5	<ul style="list-style-type: none"> <li>To note differences in the natural habitats they visit and discuss how the animals and plants within these environments differ. To consider how the animals and plants are suited to the environment and note why they would not survive in alternative habitats. To think of some rules for visiting these areas and ways that humans can protect them for the wildlife there. To record these in an informative leaflet in their scrapbooks.</li> <li>To use a variety of different cameras. To record the species they see in their scrapbooks through photos, diagrams and descriptions, noting the adaptations of each organism.</li> </ul>	<ul style="list-style-type: none"> <li>Science - recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs, reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>IT - select, use and combine a variety of software on a range of digital devices, including collecting, analysing, evaluating and presenting data and information</li> <li>PSHE - Being a citizen</li> <li>Rights and responsibilities</li> </ul>
6	<ul style="list-style-type: none"> <li>To note differences in the natural habitats they visit. To predict what animals and plants they will see based on the environment. To compare what they find with their predictions. To consider how the animals and plants are suited to the environment and discuss their various adaptations. To consider how these adaptations have occurred. To research the rules for visiting these areas and different ways that humans can protect them for the wildlife there. To record these in an informative leaflet in their scrapbooks.</li> <li>To use a variety of different cameras. To compare the photos taken with the cameras and decide which is best. To record the species they see in their scrapbooks through photos, diagrams and descriptions, noting the adaptations of each organism.</li> </ul>	<ul style="list-style-type: none"> <li>Science - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents, identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</li> <li>IT - select, use and combine a variety of software on a range of digital devices, including collecting, analysing, evaluating and presenting data and information</li> </ul>

7	<ul style="list-style-type: none"> <li>To visit different ecosystems and note the differences between them. To consider the variation of the species seen within and between each of the ecosystems. To note the food chains within the ecosystems and record these in their scrapbooks. To discuss the ways humans can protect these ecosystems and note how each has different needs. To record this as clear bullet points in their scrapbooks.</li> <li>To use a variety of cameras and know the parts of each of them. To use a tripod. To take photos of different species and record the variation and adaptations seen in their scrapbooks. To evaluate their photos noting if they are focused, interesting shots and discuss ways they could be improved.</li> </ul>	<ul style="list-style-type: none"> <li>Science - the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops, differences between species,</li> <li>the variation between individuals within a species being continuous or discontinuous, to include measurement and graphical representation of variation,</li> <li>Photography (Art) - name parts of the camera, know the word focus, to know why a tripod is used and be able to set it up, know that a photo should be interesting</li> </ul>
8	<ul style="list-style-type: none"> <li>To visit different ecosystems and note the differences between them. To consider the variation of the species seen within and between each of the ecosystems. To note the ecological relationships seen in each ecosystem and record these in their scrapbooks. To discuss the ways humans can protect these ecosystems and note how each has different needs. To record this as a power point presentation and present it to their peers.</li> <li>To discuss the pros and cons of location photography in comparison to studio photography. To take photos of different species and record the ecological relationships seen in their scrapbooks. To evaluate their photos and consider ways to improve their location photography skills.</li> </ul>	<ul style="list-style-type: none"> <li>Science - the variation between species and between individuals of the same species meaning some organisms compete more successfully, which can drive natural selection, the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material, changes in the environment which may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction</li> <li>Photography (Art) – the difficulties of taking images on location and how to overcome these, including lighting, focusing on subjects and simplicity and background.</li> </ul>
9	<ul style="list-style-type: none"> <li>To visit different ecosystems and note the differences between them. To consider the genetic variation of the species seen within and between each of the ecosystems and note how inheritance and selection has caused these. To record genetic crosses in their scrapbooks to detail the variation seen. To discuss the ways humans can protect these ecosystems and note how each has different needs. To record this as a documentary/ informative short film.</li> <li>To use their documentary photography skills and experimental imagery skills to take a variety of photos. To compare and evaluate their own and their peers' images. To consider ways they can improve their images and put these into practise in future weeks.</li> </ul>	<ul style="list-style-type: none"> <li>Science - heredity as the process by which genetic information is transmitted from one generation to the next, the variation between individuals within a species being continuous or discontinuous, to include measurement and graphical representation of variation, the variation between species and between individuals of the same species meaning some organisms compete more successfully, which can drive natural selection.</li> <li>Photography (Art) – understand the style of documentary photography, focusing on an ongoing issue or story seen through a series of photographs, drawing attention to difficult or dangerous world issues which require some form of remedial or political action.</li> </ul>

10	<ul style="list-style-type: none"> <li>To sample organisms found in a variety of different natural habitats using quadrats. To analyse the results of their sampling considering the adaptations needed to survive in the ecosystems. To create a simple presentation aimed at the younger school demonstrating the importance of nature and how we can protect it.</li> <li>To develop their own photography project showcasing a particular interest they have and using the skills learnt within KS3.</li> </ul>	<ul style="list-style-type: none"> <li>Science - using scientific theories and explanations to develop hypotheses, planning experiments to make observations, test hypotheses or explore phenomena, applying a knowledge of a range of techniques, apparatus, and materials to select those appropriate both for fieldwork and for experiments, carrying out experiments appropriately, having due regard to the correct manipulation of apparatus, the accuracy of measurements and health and safety considerations, recognising when to apply a knowledge of sampling techniques to ensure any samples collected are representative, making and recording observations and measurements using a range of apparatus and methods, evaluating methods and suggesting possible improvements and further investigations, presenting observations and other data using appropriate methods.</li> <li>Photography GCSE - Students create a personal portfolio of work that demonstrates the knowledge, understanding and skills from the specification.</li> </ul>
11	<ul style="list-style-type: none"> <li>To sample organisms found in a variety of different natural habitats using quadrats. To compare random sampling and systematic sampling methods. To analyse the results of their sampling and decided which method is best for each habitat. To create a presentation aimed at school staff to encourage outdoor learning based on fostering wellbeing in students.</li> <li>To develop their own photography project showcasing a particular interest they have and using the skills learnt within KS3.</li> </ul>	<ul style="list-style-type: none"> <li>Science - using scientific theories and explanations to develop hypotheses, planning experiments to make observations, test hypotheses or explore phenomena, applying a knowledge of a range of techniques, apparatus, and materials to select those appropriate both for fieldwork and for experiments, carrying out experiments appropriately, having due regard to the correct manipulation of apparatus, the accuracy of measurements and health and safety considerations, recognising when to apply a knowledge of sampling techniques to ensure any samples collected are representative, making and recording observations and measurements using a range of apparatus and methods, evaluating methods and suggesting possible improvements and further investigations, presenting observations and other data using appropriate methods.</li> <li>Photography GCSE - Students create a personal portfolio of work that demonstrates the knowledge, understanding and skills from the specification.</li> </ul>
12	<ul style="list-style-type: none"> <li>To discuss possible careers within nature and wildlife protection and within photography. To ask questions to professionals in each field and write job descriptions for some roles. To research local charities that protect natural habitats and find out about their work. To support the charities with some of their projects.</li> <li>To take images of the habitats to support the charities campaigns and make posters using them.</li> </ul>	<ul style="list-style-type: none"> <li>Careers education – develop knowledge and experience of a range of careers in different fields.</li> <li>Life skills – gain experience within the local community and an awareness of local charities.</li> </ul>
13	<ul style="list-style-type: none"> <li>To discuss possible careers within nature and wildlife protection and within photography. To ask questions to professionals in each field and organise work experience that interests the student. To research local charities that encourage children to become involved in nature. To support the charities with some of their projects.</li> <li>To take images of the habitats to support the charities campaigns and make informative leaflets using them.</li> </ul>	<ul style="list-style-type: none"> <li>Careers education – develop knowledge and experience of a range of careers in different fields.</li> <li>Life skills – gain experience within the local community and an awareness of local charities.</li> </ul>

# Forest School

YEARS	EXPECTED OUTCOMES & PROGRESSION	CROSS CURRICULAR LINKS
1	<ul style="list-style-type: none"> <li>• To recognise a woodland environment.</li> <li>• With adult support to discuss some of the risks of the environment.</li> <li>• To be comfortable within an outdoor area and with some support be able to listen and learn.</li> <li>• To use different natural materials.</li> <li>• To recognise some of the wildlife and discuss what they can see, including counting.</li> <li>• To use simple tools with adult support.</li> <li>• To know the safety rules of a camp fire.</li> <li>• To make natural art.</li> <li>• To work as part of a group.</li> </ul>	<ul style="list-style-type: none"> <li>• Geography - use simple fieldwork and observational skills to study the geography of the local area.</li> <li>• English - listen and respond appropriately to adults and their peers.</li> <li>• Science - identify and name a variety of common wild and garden plants, including deciduous and evergreen trees, describe the simple physical properties of a variety of everyday materials.</li> <li>• PSHE - Working well and celebrating achievement with a partner, tackling new challenges, identifying and overcoming obstacles</li> </ul>
2	<ul style="list-style-type: none"> <li>• To recognise a woodland environment.</li> <li>• With adult support to discuss some of the risks of the environment and think about ways to manage the risks.</li> <li>• To be comfortable within an outdoor area and with some support be able to listen and learn.</li> <li>• To use the map to locate the forest school area.</li> <li>• To use different natural materials and discuss their properties using simple terms, e.g. soft, hard, bendy.</li> <li>• To recognise some of the wildlife and discuss what they can see using the words plant and animals.</li> <li>• To discuss how the wildlife is suited to the environment.</li> <li>• To use simple tools with adult support and consider how to use them safely.</li> <li>• To know the safety rules of a camp fire and stick to them.</li> <li>• To make natural art.</li> <li>• To investigate capacity using the mud kitchen.</li> <li>• To work as part of a group.</li> </ul>	<ul style="list-style-type: none"> <li>• Maths - compare, describe and solve practical problems for capacity and volume.</li> <li>• Geography - devise a simple map; and use and construct basic symbols in a key.</li> <li>• English - ask relevant questions to extend their understanding and knowledge.</li> <li>• Science - identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other, identify and name a variety of plants and animals in their habitats, identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>• PSHE - Group co-operation and perseverance.</li> </ul>

3	<ul style="list-style-type: none"> <li>• To recognise a woodland environment and consider the human and physical geography of the location.</li> <li>• To discuss some of the risks of the environment and think about ways to manage the risks.</li> <li>• To be confident within an outdoor area and be able to listen and learn.</li> <li>• To use different natural materials and discuss their properties using scientific language.</li> <li>• To make natural art with chosen materials.</li> <li>• To consider the soil and what it contains.</li> <li>• To use simple tools and consider how to use them safely.</li> <li>• To know the safety rules of a camp fire and stick to them.</li> <li>• To work as part of a group.</li> <li>• To investigate capacity using the mud kitchen.</li> </ul>	<ul style="list-style-type: none"> <li>• Maths - measure, compare, add and subtract volume and capacity.</li> <li>• Geography - understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom.</li> <li>• Science - recognise that soils are made from rocks and organic matter.</li> <li>• English - maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments.</li> <li>• PSHE - Motivation and enthusiasm, recognising and trying to overcome obstacles.</li> </ul>
4	<ul style="list-style-type: none"> <li>• To know what a woodland environment looks like and consider times they have visited them previously.</li> <li>• To recognise the risks of the environment and think about ways to manage the risks.</li> <li>• To be confident within an outdoor area and be able to listen and learn.</li> <li>• To choose different natural materials for a task based on their properties.</li> <li>• To make natural art with the chosen materials.</li> <li>• To consider how the environment could change and endanger the wildlife.</li> <li>• To use simple tools and recognise how to use them safely.</li> <li>• To independently think of the safety rules of a camp fire and stick to them.</li> <li>• To consider what a shelter requires and build one.</li> <li>• To work as part of a group.</li> </ul>	<ul style="list-style-type: none"> <li>• Geography - human geography, including: types of settlement and land use.</li> <li>• Science - recognise that environments can change and that this can sometimes pose dangers to living things.</li> <li>• English - articulate and justify answers, arguments and opinions.</li> <li>• PSHE - Achieving goals, working in a group, celebrating contributions</li> </ul>
5	<ul style="list-style-type: none"> <li>• To know what a woodland environment looks like and consider times they have visited them previously.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> <li>• To choose different natural materials for a task based on their properties and explain their reasoning, including building and art.</li> <li>• To know the habitats that can be found in the woodland.</li> <li>• To use simple tools for a variety of tasks and recognise how to use them safely.</li> <li>• To independently think of the safety rules of a camp fire and stick to them.</li> <li>• To work as part of a group.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets, give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</li> <li>• English - use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.</li> <li>• PSHE - Motivation</li> </ul>
6	<ul style="list-style-type: none"> <li>• To consider how a woodland environment differs from other environments.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> <li>• To choose different natural materials for a task based on their properties and explain their reasoning, including building and art.</li> <li>• To consider how to classify the wildlife found.</li> <li>• To lead team tasks and help support their peers.</li> <li>• To use simple tools for a variety of tasks and recognise how to use them safely.</li> <li>• To light a camp fire following the safety rules.</li> <li>• To investigate capacity and measure using the mud kitchen.</li> <li>• To work as part of a group.</li> </ul>	<ul style="list-style-type: none"> <li>• English - consider and evaluate different viewpoints, attending to and building on the contributions of others.</li> <li>• Science - give reasons for classifying plants and animals based on specific characteristics.</li> <li>• Maths - solve problems involving the calculation and conversion of units of measure.</li> <li>• PSHE – Motivation, recognising achievements, compliments.</li> </ul>

7	<ul style="list-style-type: none"> <li>• To know how a woodland environment differs from others.</li> <li>• To consider ways to respect the environment.</li> <li>• To work on an extended project with support.</li> <li>• To use the correct tools for a job safely with some support.</li> <li>• To light a camp fire following the safety rules.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience, use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety, evaluate risks.</li> <li>• English - using Standard English confidently in a range of formal and informal contexts.</li> <li>• PSHE - Steps to achievement, managing set-backs, motivation and rewards.</li> </ul>
8	<ul style="list-style-type: none"> <li>• To know how a woodland environment differs from others and use comparative language.</li> <li>• To consider ways to respect the environment.</li> <li>• To work on an extended project and remain motivated with support.</li> <li>• To use the correct tools for a job safely with some support to choose the correct tool.</li> <li>• To light a camp fire following the safety rules and consider how things are heated.</li> <li>• To consider the organisms within the environment.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety, how organisms affect, and are affected by, their environment, evaluate risks, heating and thermal equilibrium.</li> <li>• English - using Standard English confidently in a range of formal and informal contexts.</li> <li>• PSHE - Short-, medium- and long-term goals, planning and reviewing goals and priorities.</li> </ul>
9	<ul style="list-style-type: none"> <li>• To know how a woodland environment differs from others and consider how this affects the organisms within the environment.</li> <li>• To consider ways to respect the environment and put these into practise.</li> <li>• To work on an extended project and remain motivated as part of a team.</li> <li>• To use the correct tools for a job safely and to choose the correct tool.</li> <li>• To light a camp fire following the safety rules.</li> <li>• To know what a fire needs to burn.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Science – the chemical reaction of combustion, evaluate risks.</li> <li>• English - using Standard English confidently in a range of formal and informal contexts.</li> <li>• PSHE - Identifying strengths.</li> </ul>

10	<ul style="list-style-type: none"> <li>• To know how a woodland environment differs from others and consider how this affects the organisms within the environment.</li> <li>• To discuss with peers ways to respect the environment, put these into practise and consider ways that others could be informed and monitored.</li> <li>• To plan, time manage and work on an extended project involving mathematics and remain motivated as part of a team.</li> <li>• To lead a team of their peers.</li> <li>• To consider the use of different tools and make reasoned decisions on which to use.</li> <li>• To light a camp fire following the safety rules and ensure others are too.</li> <li>• To know what a fire needs to burn and ensure this is provided safely.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Maths - develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems.</li> <li>• Science - carrying out experiments appropriately, having due regard to the correct manipulation of apparatus, the accuracy of measurements and health and safety considerations.</li> <li>• PSHE - Overcoming challenges and identifying alternatives</li> <li>• (adaptable/flexible).</li> </ul>
11	<ul style="list-style-type: none"> <li>• To know how a woodland environment differs from others and consider how this affects the biodiversity.</li> <li>• To discuss with peers ways to respect the environment, put these into practise and consider ways that others could be informed and monitored.</li> <li>• To plan, time manage and work on an extended project and remain motivated as part of a team.</li> <li>• To make sensible suggestions as to what they would like to undertake as their project.</li> <li>• To lead a team of their peers and consider each individual's abilities.</li> <li>• To consider the use of different tools and make reasoned decisions on which to use.</li> <li>• To light a camp fire following the safety rules and ensure others are too.</li> <li>• To recognise the risks of the environment, think about ways to manage the risks, and take supported risks appropriate to the environment and to themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Science - carrying out experiments appropriately, having due regard to the correct manipulation of apparatus, the accuracy of measurements and health and safety considerations.</li> <li>• PSHE - Goals and aspirations, changing goals, contingency planning.</li> </ul>
12	<ul style="list-style-type: none"> <li>• To discuss possible careers related to woodland environments and forest school.</li> <li>• To ask questions of professionals working within these fields.</li> <li>• To research organisations that aim to maintain woodlands, e.g. forestry commission, and find out what they do.</li> <li>• To support an organisation by volunteering.</li> </ul>	<ul style="list-style-type: none"> <li>• Careers education – develop knowledge and experience of a range of careers in different fields.</li> <li>• Life skills – gain experience within the local community and an awareness of local charities.</li> </ul>
13	<ul style="list-style-type: none"> <li>• To develop their own forest school session with support from trained professionals. To consider their intended outcome and how to achieve this. To ensure their activities are suitable for the age range and engaging. To deliver the session and evaluate it afterwards.</li> </ul>	<ul style="list-style-type: none"> <li>• Careers education – develop knowledge and experience of a career in teaching and as a forest school leader.</li> <li>• Life skills – gain experience working with young people and leading a teaching session.</li> </ul>