



Science Curriculum Sequences of Learning

	<p>Science at Foundation Stage is covered in the 'Understanding the World' area of the EYFS Curriculum. It is introduced through activities that encourage every child to explore, problem solve, observe, predict, think, make decisions and talk about the world around them.</p>
EYFS	<p>Children in EYFS work towards the 'Understanding of the World' program of study from the statutory framework:</p> <ul style="list-style-type: none">• Draw information from a simple map• Recognise similarities and differences between life in this country and life in other countries• Explore the natural world around them – observe and interact with natural processes• Describe what they see, hear and feel – commenting on things they have seen whilst outside, including plants and animals• Recognise some environments that are different from one in which they live• Understand the effect of changing seasons on the natural world around them



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	Autumn Term 1: Seasonal Changes Everyday materials - Exploring everyday materials	Autumn Term 2: Seasonal Changes Everyday materials - Building	Spring Term 1: Seasonal Changes Animals, including humans - All about me	Spring term 2: Seasonal Changes Plants	Summer term 1: Seasonal Changes Animals, including humans	Summer term 1: Seasonal Changes
Year 1	<ul style="list-style-type: none"> As scientists, we will learn to understand there are four seasons. As scientists, we will learn to identify and name a variety of everyday materials. As scientists, we will learn to distinguish between an object and the material it is made from. As scientists, we will learn to describe the properties of everyday materials As scientists, we will learn to identify objects that are natural and those that are manmade. As scientists, we will learn to predict and identify if an object will float or sink and pets. As scientists, we will learn to investigate which materials are best for different objects. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the changes that take place in autumn As scientists, we will learn to build a structure strong enough to withstand wind. As scientists, we will learn to build a waterproof structure. As scientists, we will learn to understand the properties of glass and its uses. As scientists, we will learn to understand that materials are used to create a variety of furniture. As scientists, we will learn to understand the different properties of different fabrics. As scientists, we will learn to be able to explain the uses of materials and why they are suitable. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the changes that take place in winter. As scientists, we will learn to name the basic parts of the human body. As scientists, we will learn to understand how our eyes allow us to see. As scientists, we will learn to understand how our ears allow us to hear. As scientists, we will learn to understand how our tongue allows us to taste. As scientists, we will explore the sense of touch As scientists, we will learn to investigate how your nose smells. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the changes that take place in spring. As scientists, we will learn to understand that seeds grow into plants. As scientists, we will learn to identify the basic parts of a plant and tree. As scientists, we will learn to understand that different plants can grow in the same environment. As scientists, we will learn to know the difference between deciduous and evergreen trees. As scientists, we will learn to know that fruit trees and vegetables are varieties of plants . As scientists, we will learn to record the growth of a plant. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the changes that take place in summer. As scientists, we will learn to identify and name animal families. As scientists, we will learn to describe the differences between mammals and birds. As scientists, we will learn describe the differences between amphibians, reptiles and fish. As scientists, we will learn to identify the types of food living things eat. As scientists, we will learn to describe the difference between wild animals and pets. As scientists, we will learn to be able to explain the characteristics of an animal. 	<ul style="list-style-type: none"> As scientists, we will learn to investigate how you can measure rainfall.
	Autumn Term 1: Living things and their habitats	Autumn Term 2: Uses of Every Materials	Spring Term 1: Animals, including humans 1 - Health & survival	Spring term 2: Plants – growth and care	Summer term 1: Animals, including humans 2 - Life cycles	Summer term 1: - Living Things and their habitats – Habitats from around the world



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Year 2	<ul style="list-style-type: none">• As scientists, we will learn to compare the differences between things that are living, dead, and things that have never been alive.• As scientists, we will learn to identify and name a variety of plants and animals in a microhabitat.• As scientists, we will learn to design a suitable microhabitat where living things could survive.• As scientists, we will learn to describe what animals eat to survive in their habitats.• As scientists, we will learn to understand a food chain.• As scientists, we will learn to understand the journey food makes from the farm to the supermarket.	<ul style="list-style-type: none">• As scientists, we will learn to identify different materials and their uses.• As scientists, we will learn to understand how to select the right materials to build a bridge.• As scientists, we will learn to investigate and test the stretchiness of materials.• As scientists, we will learn to understand that materials can change their shape by twisting, bending, squashing or stretching• As scientists, we will find out about Charles Macintosh and explore how materials are suitable for different purposes.• As scientists, we will learn which materials change shape when making a road with John McAdam.	<ul style="list-style-type: none">• As scientists, we will learn to describe the needs of animals for survival.• As scientists, we will learn to describe the needs of humans, for survival.• As scientists, we will learn to understand the importance of eating the right food.• As scientists, we will learn to describe what a healthy, balanced diet looks like.• As scientists, we will learn to investigate the impact of exercise on our bodies.• As scientists, we will learn to Investigate the importance of hygiene.	<ul style="list-style-type: none">• As scientists, we will learn to know the difference between seeds and bulbs.• As scientists, we will learn to design an experiment to find out what plants need to grow.• As scientists, we will learn to describe what plants need to grow and stay healthy.• As scientists, we will learn to be able to describe the life cycle of a plant.• As scientists, we will learn to observe and record the growth of plants over time.• As scientists, we will learn to understand that plants adapt to suit their environment.	<ul style="list-style-type: none">• As scientists, we will learn to order the stages of the human life cycle.• As scientists, we will learn to describe the stages of a human life cycle.• As scientists, we will learn to identify the offspring and parent of an animal.• As scientists, we will learn to compare the life cycle of a chicken with a human.• As scientists, we will learn to describe the life cycle of a butterfly.• As scientists, we will learn to describe the life cycle of a frog and compare it to other animals.	<ul style="list-style-type: none">• As scientists, we will learn to identify which animals might live in different habitats.• As scientists, we will learn to identify how environments are constantly changing and what humans can do to protect the environment.• As scientists, we will learn to identify why rainforests are important and how they are endangered.• As scientists, we will learn to be able to describe ocean habitats.• As scientists, we will identify the difference between the Arctic and Antarctic habitat.• As scientists, we will learn to understand what animals are best suited to live in the desert, underground or in the ocean.
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	Autumn Term 1: Rocks	Autumn Term 2: Light	Spring Term 1: Forces and Magnets	Spring term 2: Plants Growth and Care	Summer term 1: Animals Including Humans	Summer term 1: Scientific Enquiry
Year 3	<ul style="list-style-type: none"> As scientists, we will learn to compare the formation and properties of igneous rocks. As scientists, we will learn to compare the formation and properties of sedimentary and metamorphic rocks. As scientists, we will learn to understand about weathering and the suitability of rocks for different purposes. As scientists, we will learn to understand how water contributes to the weathering of rocks. As scientists, we will learn to understand how fossils are formed. As scientists, we will learn to identify different types of soil. 	<ul style="list-style-type: none"> As scientists, we will learn to identify the difference between light sources and non-light sources. As scientists, we will learn to understand that light that comes from the sun and how to stay safe. As scientists, we will learn to investigate materials which are reflective. As scientists, we will learn to understand how shadows are formed. As scientists, we will learn to investigate how shadows change throughout the day. As scientists, we will learn to investigate how you can change the size of a shadow. 	<ul style="list-style-type: none"> As scientists, we will learn to identify contact and non-contact forces. As scientists, we will learn to compare how things move on different surfaces. As scientists, we will learn to describe different types of magnets. As scientists, we will learn to compare the properties of magnets and everyday objects that are magnetic. As scientists, we will learn to understand that magnetic forces can act at a distance. As scientists, we will learn to investigate the everyday uses of magnets. 	<ul style="list-style-type: none"> As scientists, we will learn to compare the effect of different factors on plant growth. As scientists, we will learn to identify and describe the functions of different parts of a flowering plant and how they are used in photosynthesis. As scientists, we will learn to investigate the way in which water is transported within plants. As scientists, we will learn to understand the part that flowers play in the life cycle of flowering plants. As scientists, we will learn to understand the pollination process and the ways in which seeds are dispersed. As scientists, we will learn to explain the effect of different factors on plant growth. 	<ul style="list-style-type: none"> As scientists, we will learn to identify the 5 key food groups. As scientists, we will learn to identify nutrition in the food we eat. As scientists, we will learn to identify different types of skeletons. As scientists, we will learn to identify different parts of the human skeleton. As scientists, we will learn to identify the key features of animals and their skeletons. As scientists, we will learn to investigate the role of muscles. 	<ul style="list-style-type: none"> As scientists, we will learn to ask relevant questions and write a prediction. As scientists, we will learn to record and present results. As scientists, we will learn to write a method and carry out a practical test. As scientists, we will learn to write a conclusion. As scientists, we will learn to understand how to make a fair test with controls and variables. As scientists, we will learn to use scientific evidence to answer questions.



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	Autumn Term 1: States of Matter	Autumn Term 2: Living things and their Habitats - conservation	Spring Term 1: Electricity	Spring term 2: Animals including Humans	Summer term 1: Living things and their Habitats	Summer term 1: Sound
Year 4	<ul style="list-style-type: none"> As scientists, we will learn to identify, compare and group the 3 states of matter. As scientists, we will learn to investigate how particles behave in solids, liquids and gases. As scientists, we will learn to investigate melting points. As scientists, we will learn to investigate and describe freezing and boiling points. As scientists, we will learn to define and investigate evaporation and condensation. As scientists, we will learn to understand the importance of evaporation and condensation within the water cycle. 	<ul style="list-style-type: none"> As scientists, we will learn to describe ecosystems and how they are affected by changes in the seasons. As scientists, we will learn to understand human impact on the environment through deforestation. As scientists, we will learn to identify and understand the impact of air pollution on the environment and human health. As scientists, we will learn to understand how water pollution is caused and the impact of different kinds of water pollution. As scientists, we will learn to investigate methods that can be used to conserve water. As scientists, we will learn to understand how humans can have a positive impact on the environment. 	<ul style="list-style-type: none"> As scientists, we will learn to identify electrical appliances and understand how to keep safe when using them. As scientists, we will learn to construct a series circuit and identify the electrical components. As scientists, we will learn to investigate how an electrical circuit works. As scientists, we will learn to understand the difference between conductors and insulators. As scientists, we will learn to understand how an electrical switch works. As scientists, we will learn to investigate how electrical components can change within a circuit. 	<ul style="list-style-type: none"> As scientists, we will learn to identify the organs in the digestive system. As scientists, we will learn to describe the functions of the main organs in the digestive system. As scientists, we will learn to identify and explain the functions of the types of human teeth. As scientists, we will learn to Investigate the effects of different liquids on the teeth. As scientists, we will learn to understand and construct food chains. As scientists, we will learn to create food webs. 	<ul style="list-style-type: none"> As scientists, we will learn to understand that living things are suited to different environments. As scientists, we will learn to research and describe different habitats found in the UK. As scientists, we will learn to identify different ways that animals can be classified. As scientists, we will learn to understand how to create and interpret a classification key. As scientists, we will learn to understand and describe adaptations to create classification keys. As scientists, we will learn to use classification keys to identify pond plants. 	<ul style="list-style-type: none"> As scientists, we will learn to understand how sounds are made. As scientists, we will learn to investigate how vibrations from sounds travel through a medium to the ear. As scientists, we will learn to understand sound insulation. As scientists, we will learn to understand that the volume and height of sound wave depends of how much energy it is given. As scientists, we will learn investigate how to change pitch. As scientists, we will learn to investigate how sounds change as the distance from the sound source increases.



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	Autumn Term 1: Forces	Autumn Term 2: Earth and Space	Term 1: Properties of materials	Spring term 2: Changes of Materials	Summer term 1: Living things and their Habitats	Summer term 2: Animals Including Humans
Year 5	<ul style="list-style-type: none"> As scientists, we will learn to investigate gravity and the life and work of Isaac Newton. As scientists, we will learn to examine the connection between air resistance and parachutes. As scientists, we will learn to identify factors which affect an object's ability to resist water. As scientists, we will learn to investigate the effects of friction on different surfaces. As scientists, we will learn to investigate how levers and pulleys work. As scientists, we will learn to investigate how gears work. 	<ul style="list-style-type: none"> As scientists, we will learn to describe the solar system and its planets. As scientists, we will learn to understand the heliocentric model of the solar system. As scientists, we will learn to be able to explain the Earth's movement in space. As scientists, we will learn to explain the Earth's rotation and night and day. As scientists, we will learn to explain the movement of the Moon. As scientists, we will learn to design a planet using scientific knowledge. 	<ul style="list-style-type: none"> As scientists, we will learn to investigate properties of materials. As scientists, we will learn to investigate thermal conductors and thermal insulators. As scientists, we will learn to investigate the hardness of materials. As scientists, we will learn to know that some materials that become soluble in water. As scientists, we will learn to investigate the solubility of materials. As scientists, we will learn to investigate how mixtures could be separated by filtering, sieving, evaporating or magnets. 	<ul style="list-style-type: none"> As scientists, we will learn to use evaporation to recover the solute from a solution. As scientists, we will learn to recognise and describe reversible changes. As scientists, we will learn to observe chemical reactions and describe how we know new materials are made (irreversible changes). As scientists, we will learn to investigate rusting reactions. As scientists, we will learn to investigate burning reactions. As scientists, we will learn to investigate chemical reactions. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the life process of a plant. As scientists, we will learn to understand the life cycles of mammals. As scientists, we will learn to compare the life cycles of insects and amphibians. As scientists, we will learn to understand the life cycle of birds and reptiles. As scientists, we will learn to know about the life and work of Jane Goodall and David Attenborough. As scientists, we will learn to describe the changes humans may experience during adulthood and old age. 	<ul style="list-style-type: none"> As scientists, we will learn to identify the key stages of a mammal's life cycle. As scientists, we will learn to describe the gestation periods of mammals. As scientists, we will learn to understand foetal development. As scientists, we will learn to investigate the hand span of different aged children. As scientists, we will learn to describe the changes experienced during puberty. As scientists, we will learn to research and present the life cycle of a creature.



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	Autumn Term 1: Evolution and Inheritance	Autumn Term 2: Light	Spring Term 1: Electricity	Spring term 2: Living things and Habitats	Summer term 1: Looking after the environment	Summer term 2: Animals Including Humans
Year 6	<ul style="list-style-type: none"> As scientists, we will learn to understand how offspring vary and are not identical to their parents. As scientists, we will learn to identify how animals and plants are adapted to suit their environment. As scientists, we will learn to understand what we can learn from fossils. As scientists, we will learn to understand the theory of evolution. As scientists, we will learn to understand human evolution. 	<ul style="list-style-type: none"> As scientists, we will learn to investigate how light travels. As scientists, we will learn to understand that light is reflected off surfaces so we can see it. As scientists, we will learn to understand and explain how reflection can be used to help us see. As scientists, we will learn to investigate how shadows can change. As scientists, we will learn to investigate how we can show why shadows have the same shape as the object that casts them. As scientists, we will learn to investigate how we see objects. 	<ul style="list-style-type: none"> As scientists, we will learn to describe the parts of an electric circuit. As scientists, we will learn to investigate voltage and its effect on an electrical circuit. As scientists, we will learn to apply our knowledge to identify and correct problems in a circuit. As scientists, we will learn to investigate what affects the output of a circuit. As scientists, we will learn to build a set of traffic lights. As scientists, we will learn to apply our knowledge of conductors and insulators. 	<ul style="list-style-type: none"> As scientists, we will learn to classify living organisms. As scientists, we will learn to classify and understand the kingdoms of life. As scientists, we will learn to classify living things using the Linnaean system. As scientists, we will learn to identify the characteristics of different types of microorganisms. As scientists, we will learn to investigate asexual reproduction through spore dispersal. As scientists, we will learn to classify and describe and present data about living organism. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the effects of climate change. As scientists, we will learn to identify ways to reduce how much rubbish is sent to landfill. As scientists, we will learn to identify ways to reduce energy consumption. As scientists, we will learn to understand what the industrial revolution is. As scientists, we will learn to understand the outcomes of COP26. As scientists, we will learn to compare data associated with the weather. 	<ul style="list-style-type: none"> As scientists, we will learn to understand the function of the heart and its role in the circulatory system. As scientists, we will learn to identify and compare blood vessels. As scientists, we will learn to describe the functions of the heart, blood vessels and blood. As scientists, we will learn to describe how the body transports water and nutrients. As scientists, we will learn to investigate what affects your heart rate. As scientists, we will learn to recognise the impact of drugs and alcohol on the body.