

Progression of Learning: Science

For the curriculum content & planning please see the Curriculum Overviews (Yearly & Half Termly)

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
A1	All About Me I can name my body parts. I can name the features of my face. I can name and describe the five senses. I can talk about the weather. I can name the four seasons. I can describe changes that occur during the four seasons.	 The Human Body I know that our bodies have five senses. I know that we use our eyes to see. I know that sounds travel through our ears to send messages to our brain. I know that our senses help us to understand the world around us. I understand that some people have problems with their senses, such as blindness or deafness. I know my senses help me to be aware of the world around me. 	 The Human Body I know Animals, including humans, need air, food and water to survive. I know that our skeleton and our muscles help us to move. I understand that our bodies digest our food I know that our heart pumps blood around our body. I understand that scientists have found ways to keep us healthy. I can collect data to answer this question: Is (insert class name) a healthy class? 	 The Human Body I know that we can control our voluntary muscles, but we do not control our involuntary muscles. I know our bones help us to move and protect some parts of our bodies. I know that the brain is the centre of the nervous system. I understand how the brain and mouth start the digestive process. I can describe the simple functions of the basic parts of the digestive system in humans. I am able to describe one of the many systems in our body. 	human body and we need nutrition to keep our bodies working as they should. I can identify the different types of teeth in humans and their simple functions. I know how food is digested and excreted I know a healthy diet keeps our bodies healthy. I understand the essential vitamins and minerals needed in our body.	 I know that the human body changes as it goes through puberty. I can identify physical 	The Huma Body I understand that the heart is formed of two sets of chambers. I understand that blood vessels transport blood around the body I understand that blood is made up of different components I understand how the heart rate can speed up or slow down, depending on what the body is doing I know there are many things that can be varied and changed in an experiment, we call the things we can change variables. I understand that the blood circulates throughout the body, gaining oxygen in the lungs and that it is the heart that pumps the blood around
A2	Dinosaurs I know what a dinosaur is. I can describe a carnivore and herbivore. I can name the three Mesozoic periods: Triassic, Jurassic, Cretaceous. I know what fossils are. I can identify and talk about different types of dinosaurs (Tyrannosaurs Rex,	 Animals and their Needs I can I can name and describe a variety of animals. I can understand that we can group animals according to their features. I can explain how animals can be grouped according to what they eat. I can describe the needs of a pet. 	Living Things and their Environments I can explain that a habitat is the name given to a place where plants or animals live. I can describe that rainforest habitats are home to many different animals and plants. I can describe a meadow habitat. I can name and describe animals who live in underground	 Cycles in Nature I can explain the seasonal cycle. I know how the seasonal change effects deciduous and evergreen trees. I can explain the life cycle of caterpillars and butterflies. I can explain the life cycle of frogs. I can explain the life cycle of plants. I know that the Earth orbits the Sun and that 	Classification of Plants and Animals I understand how we classify animals. I understand how to classify vertebrates. I know and can recall the key features of fish. I know and can recall the key features of amphibians. I know and can recall the key features of amphibians.	Materials Properties- solubility, conductivity, flexibility etc, fair testing, solubility, separation of mixtures, reversible changes dissolving, mixing, change of state.	Classification of Living Things I know the two main kingdoms are plants and animals. I can identify the similarities between plant and animal cells. I can identify the differences between plant and animal cells. I can identify the five kingdoms.

		Stegosaurus, Triceratops, Pterosaur).	 I can describe an animal using scientific words. I can compare and describe a variety of animals. 	 habitats. I can explain that desert habitats are ver dry. I can explain that a food chain describes 'who eats what' within a habitat. 		 I know and can recall the key features of mammals. I know that humans can have an impact on animals and their habitats. 		I can explain Latin names for plants and animals were derived.
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Sp1	 Space I know that we live on planet Earth. I can name the 8 planets in our solar system. I know that the 8 planets orbit the sun. I understand what day and night is. I can talk about Astronauts. 	Transport I know what floating and sinking is. I can investigate objects that float and sink.	 Seasons and Weather I can name and describe the four seasons. I can explain that tools are used to gather information about the weather. I can present data using a graph. I can understand that there are different types of cloud. I can understand that weather forecasts help people to prepare for different kinds of weather. I can understand that certain types of weather can be dangerous. Assessment – I can identify and describe seasons and weather 	 I can construct an electrical circuit. I can explain what I know about electricity. 	Light The speed of light, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, the human eye.	I can understand how a change in the	Living Things Life cycles of a mammal, an amphibian, an insect and a bird, life process of reproduction in some plants and animals, Photosynthesis, vascular and non-vascular plants.	Electricity Brightness, buzzers, voltage, switches, simple circuits and symbols.
Sp2	 Minibeasts I can name common minibeasts we find outside. I can make observations of minibeasts. I can talk about changes over time. (minibeast life cycles) I know what a habitat is. I can talk about different habitats. 	 My Environment I can talk about the features of my immediate environment. I understand that environments can be damaged. I know how to take care of the environment. I know how to keep my body healthy. 	 Taking Care of the Earth I can describe ways we can take care of the Earth. I can sort natural and man-made resources. I can identify logging as a way of harvesting the Earth's natural resources. I can identify some of the ways in which the environment can be polluted. I can understand that recycling means turning 	Plants Seeds and bulbs, plants and water, light, temperature, healthy plants	Plants Functions of plants: roots, stem/trunk, leaves and flowers, Life and growth, variety of plants, water transportation, seed formation and dispersal	 Sound I know sound is caused by an object vibrating rapidly. I know sound travels through solids, liquids and gases. I know about the speed of sound. I can notice the patterns between pitch and volume. I can explain how the ear works. 		

			used things into something new. I can explain how and why people must care for the Earth.			I can explain why we must protect our hearing.		
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Su1	 At the Farm I know what a farm is. I can talk about the different jobs on a farm. I can name and identify common farm animals. I can talk about changes over time (animal life cycles). 	 Growing and Changing I can make observations of plants and animals. I can talk about changes over time (plants and animals). I can identify different types of plants; flowering, non-flowering, tree. I can identify the features of a plant. I know what plants need to survive. I can talk about where my food comes from. 	 Plants and Plant Growth I can explain what plants need in order to grow. I can name and describe the purpose of parts of a plant. I can understand that plants spread their seeds to reproduce. I can understand that some trees are evergreen and some are deciduous. I can explain how plants are grown for food. I can recognise which parts of plants we eat. 	Materials and Matter I can understand that everything around us is made from tiny building blocks we cannot see. I can understand that solids have a definite shape. I can understand that liquids can be poured. I can understand that gas is matter that cannot be held or poured. To know that we use measurements to find out how much of something we have. Assessment – I can explain what I know about solids, liquids and gases.	Rocks I can compare different types of rocks. I can group rocks based on their properties. I can explain how fossils are formed. I can explain Mary Anning's contribution to palaeontology. I can explain how soil is formed. I can investigate the permeability of different soils.	States of Matter and the Water Cycle I can identify the different stages of the water cycle. I can explain the different states of matter. I can investigate evaporation and condensation. I can explain what humidity is and precipitation is. I can identify the different clouds. I know how water is stored underground.	 Astronomy I know about the Big Bang theory. I know about our solar system. I know about the planetary motion. I know about the force of gravity. I know about the solar eclipse. I know about comets, meteors and shooting stars. I know about constellations. 	Reproduction I know about asexual reproduction in plants. I know about sexual reproduction in plants. I know about reproduction in animals, including humans. I can explain the difference between external and internal fertilisation. I can explain the different growth stages in animals, including humans.
Su2	A Healthy Us I can talk about what my body needs to stay healthy. I know why it is important to have good hygiene. I can observe the effects of exercise on my body. I know where my food comes from. I can identify fruits and vegetables.	 Around the World I can talk about different animals across the 7 continents. I can describe different environments. I can talk about the 7 continents and their climates. 	 Materials and Magnets I can recognise everyday materials. I can identify properties of materials. I can explain why materials are chosen for specific tasks. I can understand that materials can be sorted according to whether they are or are not attracted to magnets. I can investigate which material would be most suitable for Paddington Bear's hat. I can demonstrate my understanding of materials and magnets. 	Astronomy I can explain where all our planets are positioned in the solar system. I can understand that the Earth travels around the Sun. I can understand that the Moon orbits the Earth. I can name and describe some constellations. I can describe the layers of the Earth. I can describe different types of rock.	Forces and Magnets I can compare how things move on different surfaces. I know that magnetic forces can act at a distance. I know that magnets can attract and repel each other. I can identify magnetic materials. I know that magnets have two poles and a magnetic field. I know that the Earth behaves like a huge magnet.	 Electricity I know that electricity is a charge of electrons. I can explain the effects of static electricity. I can explain what an electrical current is. I can experiment with simple circuits. I can identify conductors and insulators. I know how electromagnets work and their common uses. 	 Meteorology I can explain the difference between weather and climate. I can explain what the atmosphere is. I can explain the difference between low pressure air system and high pressure air system. I know how weather is forecast. I can explain how wind is measured. I can explain the difference between a tornado an a hurricane. 	Evolution I know that animals have offspring. I know that animals have adapted to suit their environment. I know that plants have adapted to suit their environment. I know that adaption may lead to evolution. I know about the theory of evolution. I know about the theory of evolution (continued).