Science Progression Map

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4
Working Scientifically	• I can recognise that my actions have an effect on the world around me. • I can make choices and explore the resources in my environment.	• I can independently choose natural materials to explore in different ways • I can talk about what I can see, using familiar and new vocabulary • I can use my senses when exploring new materials	• I can ask simple questions when prompted. • I can make relevant observations using simple equipment. • I can conduct simple tests with some support. • I can identify and classify. • I can gather and record data. • I can recognise and discuss my findings. • I can answer simple questions using my findings and scientific vocabulary.	• I can ask simple questions. • I can begin to predict. • I can recognise that questions can be answered in different ways. • I can perform simple tests. • I can observe using different equipment. • I can identify and classify. • I can gather and record data to help answer questions. • I can communicate what I have found using simple scientific language. • I can use my observations and ideas to suggest answers to questions.	• I can ask relevant questions when prompted. • I can use different types of scientific enquiry to answer questions. • I can set up simple and practical enquiries, comparative and fair tests with some support. • I can make systematic and careful observations using simple equipment. • I can use standard units when taking measurements. • I can gather, record, classify and present data in a variety of ways with some support. • I can display my findings in different ways. • I can suggest answers using my results. • I can build a conclusion to help answer a scientific question.	• I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. • I can report my findings using oral and written explanations, present results and conclusions. • I can identify differences, similarities or changes related to simple scientific ideas. • I can use results to draw simple conclusions, make predictions, suggest improvements and raise further questions. • I can use scientific language to answer the key question. I can ask relevant questions. • I can make predictions using previous experiences. • I can use different types of scientific enquires to answer questions.

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						• I can set up simple practical enquires and fair tests. • I can make systematic and careful observations and where take accurate measurements. • I can gather, record, classify and present data in a variety of ways to help answer questions.
Plants	• I can plant seeds. • I can care for the seeds that I plant as they grow.	• I can observe plants and talk about the changes I see • I can draw observational pictures of plants at different stages of growth	• I can name a variety of common wild and garden plants. • I can name the petals, stem, leaf and root of a plant. • I can name the roots, trunk, branches and leaves of a tree	• I can describe how seeds and bulbs grow into plants. • I can describe what plants need in order to grow and stay healthy (water, light & suitable temperature)	• I can describe the function of different parts of flowing plants and trees. • I can explore and describe the needs of different plants for survival. • I can explore and describe how water is transported within plants. • I can describe the plant life cycle, especially the importance of flowers.	
Animals, including Humans	• I can observe and begin understand the changes in a life cycle. • I can use my senses. • I can name some minibeasts.	• I can talk about and identify the key changes in lifecycles • I can match baby animals to adult animals using pictures • I can name a variety of minibeasts	• I can name a variety of animals including fish, amphibians, reptiles' birds and mammals. • I can classify and name animals by what they eat (carnivore, herbivore and omnivore).	• I can explain the basic stages in a life cycle for animals, including humans. • I can describe what animals and humans need to survive. • I can describe why exercise, a balanced diet and good	• I can explain the importance of a nutritious, balanced diet. • I can explain how nutrients, water and oxygen are transported within animals and humans.	• I can identify and name the parts of the human digestive system. • I can describe the functions of the organs in the human digestive system. • I can identify and describe the

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		• I can explore where minibeasts live • I can draw pictures of minibeasts/animals I find/see in my immediate environment	• I can sort animals into categories (including fish, amphibians, reptiles, birds and mammals). • I can sort living and non-living things. • I can name the parts of the human body that I can see. • I can link the correct part of the human body to each sense. • I can name a variety of minibeasts and identify their differing features.	hygiene are important for humans. •	• I can describe and explain the skeletal system of a human. • I can describe and explain the muscular system of a human. • I can describe the purpose of the skeleton in humans and animals. • I can look in depth at a microhabitat and the importance of them. • I can group minibeasts (arthropods, molluscs and annelids).	different types of teeth in humans. • I can describe the functions of different human teeth. • I can use food chains to identify producers, predators and prey. • I can construct food chains to identify producers, predators and prey. •
All Living things and their Habitats	• I can name some living things. • I can begin to show respect for all living things	• I can name living things. • I can care for living things I find in my immediate environment		• I can identify things that are living, dead and never lived. • I can describe how a specific habitat provides for the basic needs of things living there (plants and animals). • I can identify and name plants and animals in a range of habitats. • I can match living things to their habitat. • I can describe how animals find their food. • I can name some different sources of food for animals.		• I can group living things in different ways. • I can use classification keys to group, identify and name living things. • I can create classification keys to group, identify and name living things (for others to use). • I can describe how changes to an environment could endanger living things. • I can say why minibeasts are important and discuss how they are

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				• I can explain a simple food chain. • I can group minibeasts (insects, arachnids, other).		integral to our ecosystem.
Materials	• I can choose materials for a given purpose. • I can choose materials from the environment and build purposely for myself.	• I can choose materials for different purposes • I can observe and discuss the changes in liquids and solids e.g. ice melting	• I can distinguish between an object and the material it is made from. • I can explain the materials that an object is made from. • I can name wood, plastic, glass, metal, water and rock. • I can describe the properties of everyday materials. • I can group objects based on the materials they are made from.	• I can identify and name a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard. • I can suggest why a material might or might not be used for a specific job. • I can explore how shapes can be changed by squashing, bending, twisting and stretching.		• I can group materials based on their state of matter (solid, liquid, gas). • I can describe how some materials can change state. • I can explore how materials change state. • I can measure the temperature at which materials change state. • I can describe the water cycle. • I can explain the part played by evaporation and condensation in the water cycle
Seasonal Changes	• I can talk about the weather. • I can talk about the weather changing.	• I can talk about changes I see during seasonal and local walks • I can name some seasons and talk about observations I have made • I can select the most appropriate weather for our class calendar each day	• I can observe and comment on changes in the seasons. • I can name the seasons and suggest the type of weather in each season.			

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Rocks					• I can compare and group rocks based on their appearance and physical properties, giving a reason. • I can describe how fossils are formed. • I can describe how soil is made. • I can describe and explain the difference between sedimentary and igneous rock.	
Light		• I can investigate light using a light box. • I can investigate what objects you can see through and which you can't.			• I can describe what dark is (the absence of light). • I can explain that light is needed in order to see. • I can explain that light is reflected from a surface. • I can explain and demonstrate how a shadow is formed. • I can explore shadow size and explain. • I can explain the danger of direct sunlight and describe how to keep protected	
Forces and Magnets	• I can explore and investigate magnets within the classroom.	• I can investigate how objects move on different surfaces e.g. using cars on ramps			• I can explore and describe how objects move on different surfaces. • I can explain how some forces require	

					contact and some do not, giving examples. • I can explore and explain how objects attract and repel in relation to objects and other magnets. • I can predict whether objects will be magnetic and carry out an enquiry to test this out. • I can describe how magnets work. • I can predict whether magnets will attract or repel and give a reason.	
Sound						• I can describe how sound is made. • I can explain how sound travels from a source to our ears. • I can explain the place of vibration in hearing. • I can explore the correlation between pitch and the object producing a sound. • I can explore the correlation between the volume of a sound and the strength of the vibrations that produced it. • I can describe what happens to a sound as it travels away from its source.

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Electricity						• I can identify and name appliances that require electricity to function. • I can construct a series circuit. • I can identify and name the components in a series circuit • I can draw a circuit diagram. • I can predict and test whether a lamp will light within a circuit.