



Science Progression Map

644444	Nursery	Reception	Year 1	Year 2	Year 3	Year 4
Working Scientifically <i>Plan</i>	I can talk about how something might change.	I can talk about how and why something might change.	I can ask simple questions when prompted.	I can ask simple questions.	I can ask relevant questions when prompted	I can ask relevant questions.
			I can answer simple questions using my findings and scientific vocabulary	I can recognise that questions can be answered in different ways.	I can use different types of scientific enquiry to answer questions.	I can use different types of scientific enquires to answer questions.
				I can begin to predict.	I can make predictions using previous experiences.	I can make predictions using previous experiences and prior knowledge.
Working Scientifically <i>Do</i>	I can make choices and explore the resources in my environment.	I can independently choose natural materials to explore in different ways.	I can conduct simple tests with some support.	I can perform simple tests.	I can set up simple and practical enquiries, comparative and fair tests with some support.	I can set up simple and practical enquiries, comparative and fair tests.
	I can talk about what I can see.	I can talk about what I can see, using familiar and new vocabulary.	I can gather data.	I can gather data to help answer questions.	I can use standard units when taking measurements.	I can use a range of standard units when taking measurements.
		I can use my senses when exploring new materials.	I can identify and classify.	I can identify and classify in a range of different contexts.	I can make systematic and careful observations using simple equipment.	I can make systematic and careful observations and where needed take accurate measurements.
Working Scientifically <i>Record</i>	I can observe changes.	I can observe and identify what has changed.	I can make relevant observations using simple equipment.	I can observe using a range of equipment.	I can gather, record, classify and present data in a variety of ways with some support.	- I can gather, record, classify and present data in a variety of ways to help answer questions. - I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.



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			I can record data.	I can record data to help answer questions.	I can display my findings in different ways.	I can report my findings using oral and written explanations, present results and conclusions.
Working Scientifically Review	I can recognise that my actions have an effect on the world around me.	I can recognise that my actions have an effect on the world around me.	I can recognise and discuss my findings.	I can use my observations and ideas to suggest answers to questions.	I can suggest answers using my results as evidence.	I can use scientific language to answer the key question.
			I can talk about my findings.	I can communicate what I have found using simple scientific language.	I can build a conclusion to help answer a scientific question.	I can use my prediction, data and evidence collected to draw scientific conclusions.
Plants Name and observe	I can talk about the plants I see.	I can talk about plants and the changes I see.	I can name a variety of common wild and garden plants.		I can describe the function of different parts of flowering plants and trees.	
	I can draw the plants I see.	I can draw the plants I see.	I can name the petals, stem, leaf and root of a plant.		I can describe the plant life cycle.	
			I can name the roots, trunk, branches and leaves of a tree.	I can describe and observe how different seeds and bulbs grow into plants.	I can explore the part the flower plays in the life cycle of flowering plants, including pollination, seed dispersal and seed formation.	
Plants Do	I can plant seeds.	I can observe plants.	I can plant a variety of seeds and talk about what they need to survive.			
	I can care for the seeds that I plant as they grow.	I can draw observational pictures of plants at different stages of growth and talk	I can say which trees are evergreen and which are deciduous.	I can describe what plants need in order to grow and stay healthy (water, light & suitable temperature).	- I can explore and describe the needs of different plants for survival. - I can explore and describe how water	



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		about these changes.			is transported within plants.	
Animals, including Humans	I can name some minibeasts.	I can name a variety of minibeasts.	I can name a variety of minibeasts and identify their differing features.	I can name an increasing amount of minibeasts.		
Name			I can name a variety of animals including fish, amphibians, reptiles' birds and mammals.			
	I can name some of my body parts.	I can name some human body parts.	I can name the parts of the human body that I can see.			I can identify and name the parts of the human digestive system.
Animals, including Humans	I can use my senses.	I can talk about my senses.	I can link the correct part of the human body to each sense.			
Describe	I can talk about how my body stays healthy.	I can look after my body and talk about the ways to keep it healthy.		- I can describe what animals and humans need to survive. - I can describe why exercise, a balanced diet and good hygiene are important for humans.	- 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 describe and explain the skeletal system of a human.	- I can describe the functions of the organs in the human digestive system. - I can identify and describe the different types of teeth in humans. - I can describe the functions of different human teeth.



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					- 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 observe and begin understand the changes in a life cycle.	I can talk about and identify the key changes in lifecycles.		- I can explain a simple food chain. - I can explain the basic stages in a life cycle for animals, including humans.		- I can use food chains to describe and identify producers, predators and prey.
		- I can explore where minibeasts live. - I can draw pictures of minibeasts/animals I find/see in my immediate environment.			I can look in depth at a microhabitat and the importance of them.	
Animals, including Humans Classify		I can match baby animals to adult animals using pictures.	I can sort animals into categories (including fish, amphibians, reptiles, birds and mammals).	- I can talk about the animal groups in a food chain. - I can identify animals that have offspring that grow into adult	I can group minibeasts (arthropods, molluscs and annelids).	- I can construct food chains to identify producers, predators and prey. - I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
			I can classify and name animals by what they eat (carnivore, herbivore and omnivore).			
			I can sort living and non-living things.			



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All Living things and their Habitats	I can name some living things.	I can name a variety of living things.	I can name and identify a variety of common animals.	I can identify things that are living, dead and never lived.		I can describe how changes to an environment could endanger living things.
Name	I can begin to show respect for all living things.	I can care for living things I find in my immediate environment.		- I can identify and name plants and animals in a range of habitats. - I can describe how a specific habitat provides for the basic needs of things living there (plants and animals).		I can say why minibeasts are important and discuss how they are integral to our ecosystem.
	I can observe and draw living things around me.	I can do observational drawings of my environment.		- I can describe how animals find their food. - I can name some different sources of food for animals		
All Living things and their Habitats				- I can match living things to their habitat. - I can group minibeasts.		- 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).
Materials	I can name some objects.	I can name a range of objects.	- I can name wood, plastic, glass, metal, water and rock. - I can describe the physical properties of a variety of everyday materials.	I can name and identify a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard.	- I can describe how fossils are formed. - I can describe how soil is made.	- I can name a variety of solids, liquids and gases. - I can name the states of matter.
Name						



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	I can observe the changes in liquids and solids e.g. ice melting	I can observe and discuss the changes in liquids and solids e.g. ice melting	I can explain the materials that an object is made from.	I can suggest why a material might or might not be used for a specific job.		- I can describe how some materials can change state. - I can explore how materials change state. - I can describe the water cycle.
Materials <i>Classify</i>	I can choose materials for a given purpose.	I can choose materials for different purposes.	I can group objects based on the materials they are made from and their properties.	I can group materials according to their properties.	I can compare and group rocks based on their appearance and physical properties, giving a reason.	I can group materials based on their state of matter (solid, liquid, gas).
Materials <i>Do</i>	I can choose materials from the environment and build purposely for myself.	I can choose materials from the environment and build purposely for myself and others.	- I can distinguish between an object and the material it is made from through hands on experiences. - I can investigate which objects float and which sink.	I can explore how shapes can be changed by squashing, bending, twisting and stretching.	I can describe and explain the difference between sedimentary and igneous rock and show this practically.	- I can explain the part played by evaporation and condensation in the water cycle through investigations. - I can measure the temperature at which materials change state.
Seasonal Changes <i>Name</i>	I can name the weather for that day.	- I can name and select the most appropriate weather for our class calendar each day. - I can name some seasons.	I can name the seasons and suggest the type of weather in each season.			
Seasonal Changes <i>Observe</i>	I can talk about the weather.	I can talk about observations I have made in different seasons.	I can observe the seasons throughout the year and link this to weather types.			



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	I can talk about the weather changing.	I can talk about changes I see during seasonal and local walks.	I can comment on the changes in the seasons throughout the year.			
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, describe and investigate 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	



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					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.
Electricity						• I can identify and name appliances that require electricity to function. • I can construct a series circuit. • I can identify and name the



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						components in a series circuit. • I can draw a circuit diagram. • I can predict and test whether a lamp will light within a circuit.
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