

Knowledge and skills progression grid

Topic	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5 and 6
	I can...	I can...	I can...	I can...	I can...	I can...
Plants	Begin to describe the features of plants	- Can point to and name the parts of a plant, recognising that they are not always the same e.g. leaves and stems may not be green - Can describe how plants that they have grown from seeds and bulbs have developed over time				
Animals including humans	- Describe the features of animals and compare - Give reasons for differences with some support (e.g. why do hedgehogs have spines?) - Begin to talk about and order simple life cycles	Can name a range of animals which includes animals from each of the vertebrate groups and describe their key features	- Can describe how animals, including humans, have offspring which grow into adults, using the appropriate names for the stages - Can state the basic needs of animals, including humans, for survival	- Can name the nutrients found in food - Can state that to be healthy we need to eat the right types of food to give us the correct amount of these nutrients	- Can sequence the main parts of the digestive system - Can draw the main parts of the digestive system onto a human outline	- Can explain the changes that takes place in boys and girls during puberty <i>Can draw a diagram of the circulatory system and label the parts and annotate it to show what the parts do</i>
Materials/states of matter	- Naming everyday objects, materials and organisms in the environment. - Talk about and give reasons for changes that I notice with support, e.g. melting, freezing.	Can describe the properties of different materials	Can name an object, say what material it is made from, identify its properties and make a link between the properties and a particular use	- Can create a concept map, including arrows linking the key vocabulary - Can give everyday examples of melting and freezing	<i>(completed in combination with Geography topic. Can give everyday examples of evaporation and condensation)</i>	- Can explain what dissolving means, giving examples - Can name equipment used for filtering and sieving - Can describe some simple reversible and non-reversible changes to materials, giving examples
Seasonal Changes	Name and talk about the different seasons from	Can name the four seasons and identify				

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	first-hand experience and using pictures for support	when in the year they occur and describe weather in different seasons over a year				
Living things and their habitat/evolution and inheritance	Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class e.g compare polar bear and a camel	Can find a range of items outside that are living, dead and never lived	- Can talk about what the animals eat in a habitat and how the plants provide shelter for them - Can construct a food chain that starts with a plant and has the arrows pointing in the correct direction		- Can name living things living in a range of habitats, giving the key features that helped them to identify them - Can name producers, predators and prey within a habitat	6 Can draw the life cycle of a range of animals identifying similarities and differences between the life cycles 6 Can explain the difference between sexual and asexual reproduction and give examples of how plants reproduce in both ways 6 Can give the key characteristics of the five vertebrate groups and some invertebrate groups 6 Give examples of living things that lived millions of years ago and the fossil evidence we have to support this 6 Can give examples of fossil evidence that can be used to support the theory of evolution
Rocks				- Can explain how a fossil is formed - Can explain that soils are made from rocks and also contain living/dead matter		
Light/sound/earth and space	Know that we live on planet Earth			Can name sound sources and state that sounds are produced by the vibration of the object		5 Can show, using diagrams, the movement of the Earth and Moon 5 Can show using

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				• Can give examples to demonstrate that sounds get fainter as the distance from the sound source increases		diagrams the rotation of the Earth and how this causes day and night • 6 Can describe, with diagrams or models as appropriate, how light travels in straight lines either from sources or reflected from other objects into our eyes
Forces and magnets					• Can draw diagrams using arrows to show the attraction and repulsion between the poles of magnets	• 5 Can demonstrate the effect of gravity acting on an unsupported object • 5 Can give examples of friction, water resistance and air resistance • 5 Can demonstrate how pulleys, levers and gears work
Electricity					• Can name the components in a circuit • Can make electric circuits • Can control a circuit using a switch	• 6 Knows the voltage of cells impacts the brightness of lamps.
WORKING SCIENTIFICALLY SKILLS						
Questioning	• Asks own questions from immediate environment • Responds and joins in with the questions that others ask	• Whole class questions related to direct experiences, e.g. is it dark at bedtime yet? • Begin to compare with whole class supported questions e.g. how is Autumn different to Summer? • Begin to collect and celebrate any	• Continue to celebrate curiosity and support forming questions that can be investigated. Create a 'wonderwall' to share and develop ideas. • Pose class questions that begin to create numerical data. E.g.			

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		curiosity and support children in formulating into a question that can be explored or investigated independently or part of a group task. Posing simple why questions that relate to everyday life. E.g. why do we need to wash our hands?	how many ways can I....			
Observing	- Explore the natural world around them - Attending to stimuli in environment - Making observations and comments about the world around them - Welly walks	- Creating lists in shared writing - Simple comparison e.g seasons - Looking at pictures of/animal toys	- Making observations of simple objects e.g. seeds - Adding speech bubbles to photos of activities - Sentences with numerical data e.g. How many seeds germinated or measure height of seedling. - Living eggs and or caterpillars/butterflies	- Careful description of phenomena in demonstrations related carefully to questioning focus - Making direct comparisons - Observe changes over time - Begin to use tests to create numerical data, e.g measure pH	- Relating observations to form and function e.g. teeth - Using keys to refine observation and name organisms - Make comparisons e.g. longer instruments and shorter instruments and difference in pitch - Use of electrical equipment to make observations	- Making observations with IT e.g. data logger: lux levels - Create own list of observations - Consequences of making changes to equipment, e.g. comparing range of light bulbs in a reading lamp, change number of cells in a circuit

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			Observe effects during demonstrations e.g. glitter germs		- Making observations with IT, e.g. data logging equipment: decibels	
Identifying	Naming everyday objects, materials and organisms in the environment.	- Selecting appropriate clothing for seasons - Sorting activities - Naming and labelling organisms	- Sorting by more than one criteria - Naming similar examples e.g. types of bean - Using leaves and keys to identify trees		- Using keys and decision trees - Classify teeth from form	
Recording	- Collecting and taking pictures - Drawing pictures of plants and animals	- Photos of sorting activities, e.g. sorting into hoops - Complete and add to a picture or diagram - Sorting by a list of features. E.g. has gills/feathers/live young etc. - Venn diagrams - Simple sorting tables with 2 columns	- Life cycles - Documenting changes with numerical data, e.g. height of seedling Beginning to collect data, e.g. how many woodlice are found in different areas	- Drawing changes over time - Collecting numerical data in repeated tests to look for patterns		
Comparing	Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class	Compare on simple tables with two items	Simple comparisons	Comparative tests	Identify similarities and differences or changes related to ideas and processes	

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	Comparing sizes, changes related to growth or decay					
Vocabulary		Read and spell at level consistent with literacy attainment	- Use growing reading and spelling knowledge			