

Coverage of non-statutory guidance and working scientifically

Year 2

	<u>Tick as appropriate</u>		<u>Activities we currently do</u>
<p><u>Plants</u> Pupils should use the local environment throughout the year to observe how different plants grow. Pupils should be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants. Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them.</p> <p>Pupils might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.</p>	Observing over time	√	<ul style="list-style-type: none"> • Identifying trees and plants in the school grounds. • Read the 'Tiny Seed' • Lifecycle of a plant • Labelling plant parts. • 3 different ways of seed dispersal – challenge. • Plant cress seed. • Keep diary for 2 weeks
	Identifying and classifying	√	
	Pattern seeking	√	
	Comparative and fair testing	√	
	Research using secondary resources	√	
<p><u>Animals, including humans</u> Pupils should be introduced to the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans. They should also be introduced to the processes of reproduction and growth in animals. The focus at this stage should be on questions that help pupils to recognise growth; they should not be expected to understand how reproduction occurs.</p> <p>The following examples might be used: egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb,</p>	Observing over time	√	<ul style="list-style-type: none"> • Matching adult and baby. • Human lifecycle – reading: When we were giants • Surviving on a desert island • Looking after a pet – reading: my perfect pet • Lifecycle of a butterfly/moth – watch you tube video of real butterfly and reading hungry caterpillar • Effect of exercise on heart rate – repeating range of exercises. • Designing a healthy lunch box • Writing instructions on how to wash hands
	Identifying and classifying	√	
	Pattern seeking		

<p>sheep. Growing into adults can include reference to baby, toddler, child, teenager, adult.</p> <p>Pupils might work scientifically by: observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.</p>	Comparative and fair testing	√	<ul style="list-style-type: none"> Tally charts
	Research using secondary resources	√	
<p>Uses of Everyday Materials</p> <p>Pupils should identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass). They should think about the properties of materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials. Pupils might find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.</p> <p>Pupils might work scientifically by: comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, and recording their observations.</p>	Observing over time	√	<ul style="list-style-type: none"> Outside walk and record a list of every material they can see using a tally. Label the picture of the bicycle with the name of parts and the materials used. Choose 3 parts of the bicycle to write about – why have certain materials been chosen here? Ordering bicycles through the ages Class bar chart of common materials Properties of materials – Venn diagram. Natural/man-made material comparison. Squashing, bending, twisting materials. What makes the best umbrella for Ted? Link to Macintosh. What makes the best wrapping paper for Santa?
	Identifying and classifying	√	
	Pattern seeking		
	Comparative and fair testing	√	
	Research using secondary resources		
Living things and their habitats	Observing over time		<ul style="list-style-type: none"> Sorting living/non/living/ never been alive Animal classification as a small group– reptiles,

<p>Pupils should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Pupils should be introduced to the terms ‘habitat’ (a natural environment or home of a variety of plants and animals) and ‘microhabitat’ (a very small habitat, for example for woodlice under stones, logs or leaf litter). They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest.</p> <p>Pupils might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions like: ‘Is a flame alive? Is a deciduous tree dead in winter?’ and talk about ways of answering their questions. They could construct a simple food chain that includes humans (eg, grass, cow, human). They could describe the conditions in different habitats and microhabitats (under log, on stony path, under bushes); and find out how the conditions affect the number and type(s) of plants and animals that live there.</p>	Identifying and classifying	√	<p>amphibians, birds, fish, mammals</p> <ul style="list-style-type: none"> • Tropical world trip • Simple food chain • Writing a letter describing an animal habitat • Categorising animals into habitat • Tropical world handling data – maths links: pictograms, bar charts, tally • Animal adaptation non-fiction writing
	Pattern seeking		
	Comparative and fair testing		
	Research using secondary resources	√	