



Science Progression Document

The Oaktree School

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The Oaktree School			
	Reception	Year 1	Year 2
Working Scientifically			
Skills			
		<ul style="list-style-type: none"> * ask simple questions and recognise that they can be answered in different ways * observe closely, using simple equipment * perform simple tests * identify and classify * use their observations and ideas to suggest answers to questions * gather and record data to help in answering questions. 	
Plants			
Knowledge			
	<p>30-50 Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</p> <p>30-50 Can talk about some of the things they have observed such as plants, animals, natural and found objects</p> <p>30-50 Developing an understanding of growth, decay and changes over time.</p> <p>30-50 Shows care and concern for living things and the environment.</p> <p>40-60+ Looks closely at similarities, differences, patterns and change.</p> <p>ELG Children know about similarities and differences in relation to places, objects, materials and living things.</p> <p>ELG They make observations of animals and plants and explain why some things occur, and talk about changes</p>	<ul style="list-style-type: none"> * identify and name a variety of common wild and garden plants, including deciduous and evergreen trees * identify and describe the basic structure of a variety of common flowering plants, including trees. 	<ul style="list-style-type: none"> * observe and describe how seeds and bulbs grow into mature plants * find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Skills			
		<p>Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.</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>
Animals, including humans			
Knowledge			
	<p>30-50 Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. 30-50 Can talk about some of the things they have observed such as plants, animals, natural and found objects 30-50 Developing an understanding of growth, decay and changes over time. 40-60+ Looks closely at similarities, differences, patterns and change. ELG Children know about similarities and differences in relation to places, objects, materials and living things. ELG They make observations of animals and plants and explain why some things occur, and talk about changes</p>	<ul style="list-style-type: none"> * identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals * identify and name a variety of common animals that are carnivores, herbivores and omnivores * describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) * identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 	<ul style="list-style-type: none"> * notice that animals, including humans, have offspring which grow into adults * find out about and describe the basic needs of animals, including humans, for survival (water, food and air) * describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Skills			
		Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.	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
(Uses of) Everyday materials			
Knowledge			
	30-50 Can talk about some of the things they have observed such as plants, animals, natural and found objects 30-50 Talks about why things happen and how things work. 40-60+ Looks closely at similarities, differences, patterns and change. ELG Children know about similarities and differences in relation to places, objects, materials and living things.	<ul style="list-style-type: none"> * distinguish between an object and the material from which it is made * identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock * describe the simple physical properties of a variety of everyday materials * compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<ul style="list-style-type: none"> * identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses * find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
Skills			
		Pupils might work scientifically by: performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?'	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.

Seasonal changes			
Knowledge			
	<p>30-50 Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</p> <p>30-50 Talks about why things happen and how things work.</p> <p>30-50 Developing an understanding of growth, decay and changes over time.</p> <p>40-60+ Looks closely at similarities, differences, patterns and change.</p> <p>ELG They talk about the features of their own immediate environment and how environments might vary from one another.</p>	<ul style="list-style-type: none"> * observe changes across the four seasons * observe and describe weather associated with the seasons and how day length varies. 	
Skills			
		<p>Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change</p>	
Living things in their habitats			
Knowledge			
	<p>30-50 Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</p> <p>30-50 Can talk about some of the things they have observed such as plants, animals, natural and found objects</p> <p>30-50 Shows care and concern for living</p>		<ul style="list-style-type: none"> * explore and compare the differences between things that are living, dead, and things that have never been alive * identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they

	<p>things and the environment. 40-60+ Looks closely at similarities, differences, patterns and change. ELG Children know about similarities and differences in relation to places, objects, materials and living things. ELG They talk about the features of their own immediate environment and how environments might vary from one another. ELG They make observations of animals and plants and explain why some things occur, and talk about changes</p>		<p>depend on each other * identify and name a variety of plants and animals in their habitats, including microhabitats * describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>
Skills			
			<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 for example: '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 (e.g. grass, cow, human). They could describe the conditions in different habitats and micro-habitats (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>