## **Scientific Development at Kiveton Park Infants**

	Nursery	Reception	Y1	Y2
Ask Questions	Is curious and interested to explore new and familiar experiences in nature: grass, mud, puddles, plants, animal life	Makes observations of animals and plants and explains why some things occur, and talks about changes	<ul> <li>Ask simple questions and begin to recognise that they can be answered in different ways.</li> <li>Using their observations and ideas to suggest answers to questions</li> </ul>	<ul> <li>Explore the world around them and raise their own questions.</li> <li>Use their experiences of different types of scientific enquiries, including practical activities, to begin to recognise ways in which they might answer scientific questions.</li> <li>Use simple secondary sources to find answers. Talk about similarities and differences</li> </ul>
Find Things Out		<ul> <li>Shows care and concern for living things and the environment</li> <li>Begin to understand the effect their behaviour can have on the environment</li> </ul>	Observe closely, using simple equipment	<ul> <li>Find things out using secondary sources of information</li> <li>Use simple measurements and equipment to gather data, carry out tests, record data, and talk about what they have found out and how they found it out</li> <li>Record and communicate their findings in a range of ways and begin to use simple scientific language</li> </ul>
Perform Simple Tests	<ul> <li>Beginning to understand 'why' and 'how' questions</li> <li>Understands use of objects (e.g. "What</li> </ul>	<ul> <li>Find ways to solve problems</li> <li>Find new ways to do things</li> <li>Test their ideas</li> <li>Use senses to explore the world around them</li> </ul>	With guidance, carry out simple comparative tests	Plan and carry out simple comparative tests

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	<ul> <li>do we use to cut things?')</li> </ul>			
Notice Patterns	Make observations and explain what they can see	<ul> <li>Looks closely at similarities, differences, patterns and change in nature</li> </ul>	Perform simple tests, involving observations and the gathering and recording of data	<ul> <li>Use different types of Scientific enquiry to gather and record data</li> <li>Use simple equipment to notice patterns in their observations or data</li> </ul>
Observe Changes	<ul> <li>Can talk about some of the things they have observed such as plants, animals, natural and found objects</li> </ul>	Developing an understanding of growth, decay and changes over time	Use observations and ideas to suggest answers to questions	Observe changes over time and ask questions about what they notice
Group and Classify	Sort objects into simple groups e.g. by colour, texture, shape	<ul> <li>Knows about similarities and differences in relation to places, objects, materials and living things</li> </ul>	<ul> <li>Use simple features to compare objects, materials and living things</li> <li>Identify and classify animals, plants and materials according to simple criteria</li> </ul>	Use simple features to compare objects, materials and living things, deciding how to sort and group them
Use Scientific Vocabulary	science, experiment, test, fai plants, leaf, stem, root, flowe	er	Deciduous, evergreen, tree, leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem, fruit	Seeds, bulbs, water, light, suitable, temperature, grow, healthy, germinate, decompose
	animals, humans, waterproof, natural, change, growth, decay, environment		Fish, reptiles, mammals, birds, amphibians, herbivore, omnivore, carnivore, leg, arm, elbow, head,	Survival, water, air, food, adult, baby, offspring, kitten, calf, puppy, exercise, hygiene

## **Scientific Development at Kiveton Park Infants**

ear, nose, back, wings, beak, gills, eggs, young, birth	Living, dead, habitat, energy, food chain, predator, prey, producer, consumer, energy, woodland, pond, desert
Wood, plastic, glass, paper, water, metal, rock, hard, soft, bendy, rough, smooth, opaque, transparent	Hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, waterproof, absorbent, opaque, transparent, brick, paper, fabrics, squashing, bending, twisting, stretching, elastic, foil
Summer, spring, autumn, winter, sun, day, moon, night, light, dark	
What? How? Why? Similar, different, best and worst, change, plan, look, biggest and smallest, compare, sort and group	Observe, change, slowly, quickly, describe, name, identify, label, record, measure, bigger and smaller, pattern, notice, cycle, predict