

Science whole school overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Birkrigg Reception	Introduce our weather chart. Senses walk around our school grounds. Life cycle of a bean. Plant beans. Seasonal changes – Autumn. Explore our school field. Begin to observe changes. Exploring vegetables. Porridge investigation. Baking <i>gingerbread people, bread</i>.	Learn about animals – nocturnal animals, hibernation, camouflage. Hibernation investigation – how animals keep warm. Mammals and reptiles. Changing states of matter – observing melting chocolate (<i>edible sparklers</i>). Baking <i>rainbow smarties cookies</i>.	Changing states of matter – water and ice (investigation). Seasonal changes – winter. Learn about a simple water cycle. Learn about underwater habitats and creatures that live there. Investigate how plants use water (celery investigation). Making <i>jelly</i> – observing changing states.	What animals lay eggs? Dinosaurs: Herbivores, carnivores and omnivores. Fossils. Seasonal changes – Spring. Growth – life cycle of a hen.	Observing shadows – link to The Night Pirates. Sorting materials – link to pirate treasure. Floating and sinking investigation – different types of material that float or sink. Pirate sail investigation – what material makes the best sail for a pirate boat?	Seasonal changes – Summer. Make observations and learn about some minibeasts – Ladybirds and snails. Animals in Australia – different animals live in different habitats (linked to Emma Jane's Aeroplane).
Hoad Working scientifically	Throughout the year, children will be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions					
Hoad Year 1/ 2	Everyday materials. (Y1)	Everyday materials. (Y1)	Animals, including humans. (Y1)	Animals, including humans. (Y1)	Plants. (Y1) Identifying and naming common	Plants. (Y1)

Cycle A	Seasonal changes – summer to autumn, describing the weather.	Seasonal changes – autumn to winter, variation in day length.	Naming and comparing animals, including different animal groups and carnivores, herbivores and omnivores.	Basic parts of human body and senses. Seasonal changes , winter to spring.	plants, including trees.	Structure of flowering plants, including trees. Seasonal changes , spring to summer.
Hoad Year 1/ 2 Cycle B	Seasonal changes Senses Thinking scientifically	Senses	Uses of everyday materials. (Y2)	Plants. (Y2) Particularly bulbs. Animals, including humans. (Y2) Lifecycles, including humans and their offspring. What is spring?	Living things and their habitats. (Y2) Microhabitats, simple food chains.	Animals, including humans. (Y2) Healthy living and eating. Summer.
Newlands Working scientifically	Throughout the year children will be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes					

	• using straightforward scientific evidence to answer questions or to support their findings.					
Newlands Year 3/ 4 Cycle A	Rocks. (Y3)	Rocks. (Y3)	Sound (Y4)	Light (Y3)	Living things and their habitats. (Y4)	Living things and their habitats. (Y4)
Springfield Working scientifically	Throughout the year children will be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments					
Newlands Year 3/4 Cycle B	Electricity. (Y4)	Forces and magnets. (Y3)	States of matter. (Y4)	Plants. (Y3)	Animals including humans. (Y3 and 4)	Animals including humans. (Y3 and 4)
Springfield Year 5/ 6 Cycle A	Properties and changes of materials (Y5)	Properties and changes of materials (Y5)	Living things and their habitats (Y5)	Forces (Y5)	Earth and space (5))	Animals, including humans. (Y5)
Springfield Year 5/ 6 Cycle B	Animals, including humans (Y6)	Light (Y6)	Living things and their habitats-classification (Y6)	Electricity (Y6)	Evolution and inheritance (Y6)	Evolution and inheritance (Y6)