Whole School Subject Overview **Science**

End Point Expectations

Nursery	Understanding the world: Making sense of their physical world
Reception	Understanding the world: The frequency and range of children's personal experiences increases their knowledge and sense of the world around them.
	ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants. 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. Understand some important processes and changes in the natural world around them, including the seasons and changes states of matter.
KS1 NC Working Scientifically	During years 1 and 2, pupils should 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.
LKS2 NC Working Scientifically	During years 3 and 4, pupils should 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.
UKS2 NC Working Scientifically	During years 5 and 6, pupils should 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 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.

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Aim:
The national curriculum for science aims to ensure that all pupils:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications of science**, today and for the future.

SCIENCE	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Myself and Animals Pets, farm animals, Old MacDonald, making gingerbread, mixing, changes.	Seasons and Celebrations Winter, cold, snow, dark and light	Nursery Rhymes and Traditional Tales Goldilocks and the Three Bears: Hot/cold (porridge) ice/freezing: Ice cubes	Going Wild Jungle animals, safari animals, animals of the desert Growing cress seeds	People Who Help Us Small World Hospital Fire Brigade visit Doctor visit Dentist visit Nurse visit	Water Under the Sea Sea animals Changes in water
Reception	Myself and animals Naming body parts and animal habitats Significant events, family members, special times	Seasons and Celebrations Harvest, Bonfire Night, Christmas, Family celebrations,	Once upon a time Similarities and differences between friends/food/toys etc. Chinese New Year	Wild Things Describing life cycles	People who help us Police, ambulance, teachers, coastguard, zoo keepers, builders	Water Family holidays
Y1 -continual	Seasonal change-Autumn/Winter		Seasonal change-Spring		Seasonal change-summer	

Whole School Subject Overview **Science**

Y1	Animals including humans (Humans)	Everyday Materials (1)	Everyday materials (2)	Animals including humans (Animals)	Plants Plants/trees Growing Weather observation	
Y2	Animals including humans - describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Materials -plant bulbs to observe over spring (pot outside classroom)	Plants observe and describe how seeds and bulbs grow into mature plants Animals including humans --notice that animals, including humans, have offspring which grow into adults	Living things and their habitats		Animals including humans -- find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
Y3	Animals including Humans (Skeleton and Muscles)	Rocks and Soil	Animals including Humans (nutrition)	Forces and Magnets	Plants	Light and Shadow
Y4	Animals including humans (digestion)	Electricity (Iron Man)	Living things and their habitats (Classification Keys)	Living things and their habitats (Food Chains and Food Webs)	Sound	Changing states of matter
Y5	Properties and changes of materials	Forces	Earth and Space		Living things and their habitats	Animals, including humans
Y6	Living things and their habitats	Evolution and inheritance	Light –identifying shadows.	Animals inc Humans	Electricity	