

Sutton Bonington Primary School

Science Coverage



Key Ideas taught through Science

Substantive Knowledge

- Biology: Plants
- Biology: Animals including humans
- Biology: Living things and their habitats
- Biology: Evolution and Inheritance
- Physics: Seasonal changes
- Physics: Light and sound
- Physics: Forces and magnets
- Physics: Electricity
- Physics: Earth and Space
- Chemistry: Materials

Disciplinary Knowledge

- Asking scientific questions
- Planning scientific enquiries
- Using scientific equipment
- Taking measurements and observations
- Recording data
- Presenting data
- Forming conclusions
- Using models

Early Years Foundation Stage – The Natural World

Children at the expected level of development will:

- 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 changing states of matter.

The skills and knowledge that allow children to achieve the Early Learning Goal are taught within focused tasks and the continuous provision throughout the Reception year.

Key Stage 1 - National Curriculum Science

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

Year 1 Programme of Study – Plants; Animals, including humans; Everyday materials; Seasonal changes Year 2 Programme of Study – Living things and their habitats;

Year 1 Autumn Term 1	Year 1 Autumn Term 2	Year 1 Spring Term	Year 1 Summer Term 1	Year 1 Summer Term 2
Everyday Materials	Autumn and Winter	Amazing Animals	Spring and Summer	Plants
Year 2 Autumn Term 1	Year 2 Autumn Term 2	Year 2 Spring Term	Year 2 Summer Term 1	Year 2 Summer Term 2
Animals	Uses of Materials	Habitats	Protecting our Environment	Plants and Growth

Key Stage 2 – National Curriculum Science

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.

Year 3 Programme of Study - Plants; Animals including humans; Rocks; Light; Forces and Magnets

Year 4 Programme of Study – Living things and their habitats; Animals including humans; States of matter; Sound; Electricity

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 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

Year 5 Programme of Study – Living things and their habitats; Animals including humans; Properties and changes of materials; Earth and space; Forces Year 6 Programme of Study - Living things and their habitats; Animals including humans; Evolution and inheritance; Light; Electricity

Year 3 Autumn Term 1	Year 3 Autumn Term 2	Year 3 Spring Term	Year 3 Summer Term 1	Year 3 Summer Term 2 Forces and Magnets
Rocks and Fossils	Skeletons, Muscles and Nutrition	Light and Shadows	Plants: Need for Survival	
Year 4 Autumn Term 1	Year 4 Autumn Term 2	Year 4 Spring Term	Year 4 Summer Term 1	Year 4 Summer Term 2
Teeth and Digestions	States of Matter	Living Things and Environments	Electricity	Sound
Year 5 Autumn Term 1	Year 5 Autumn Term 2	Year 5 Spring Term	Year 5 Summer Term 1	Year 5 Summer Term 2
Earth and Space	Forces	Materials: Properties and Changes	Life Cycles	Growing Older
Year 6 Autumn Term 1	Year 6 Autumn Term 2	Year 6 Spring Term	Year 6 Summer Term 1	Year 6 Summer Term 2
Light	Classification	Evolution and Inheritance	Electricity	Circulation and Lifestyle