

Science Learning Journey



YEAR 7

Animals, including humans

Living things and their habitats

To High School –

in key stage 3 children will develop a deeper understanding of a range of scientific ideas in the subject disciplines of biology, chemistry and physics. Pupils should begin to see the connections between these subject areas and become aware of some of the big ideas underpinning scientific knowledge and understanding.

In Upper Key Stage 2

Pupils read, spell and pronounce scientific vocabulary correctly.

Enrichment –

(TRANSFER) Science lessons at the Academy



Working Scientifically In Upper Key Stage 2

- 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.

Enrichment – Cambridge Museum Space

YEAR 6

Animals, including humans

Living things and their habitats

Forces

Properties and changes of materials

Earth and space

YEAR 5

Animals, including humans



Electricity

Light

Evolution and inheritance



Enrichment – Crucial Crew safety

In Lower Key Stage 2

Pupils read and spell scientific vocabulary correctly and with confidence, using their growing word-reading and spelling knowledge.

Across the school

Opportunities for LIVE lessons and in school visitors to support, enhance and enrich the curriculum.

Working Scientifically In Lower Key Stage 2

- 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.

Enrichment – How Hill Residential

Electricity

States of matter



YEAR 3

Forces and magnets

Animals, including humans

Plants

Rocks

Light

YEAR 4

Sound

Living things and their habitats

Living things and their habitats

Plants

Animals, including humans

Uses of everyday materials

YEAR 2

Everyday materials

Animals, including humans

Seasonal changes

Plants

YEAR 1

Animals – Insects
The Beach –
Weather and Seasons

Materials –
Plants
Health and Safety - Food

The Senses –
Our Bodies
Space - Forces

YEAR R

Enrichment – Africa Alive and Easton Farm

In Key Stage 1

Pupils read and spell scientific vocabulary at a level consistent with their increasing word-reading and spelling knowledge at key stage 1.

Enrichment – Thetford Forest and Pensthorpe Nature Reserve

Learning about science is done through the use of first-hand practical experiences, but there is also be some use of appropriate secondary sources, such as books, photographs and videos.



Working Scientifically In EYFS

Listen attentively and respond to what they hear with relevant questions, ask questions to clarify their understanding; offering their own ideas, using recently introduced vocabulary; Offer explanations for why things might happen, making use of recently introduced vocabulary Express their ideas about their experiences. Follow instructions involving several ideas or actions. Work and play cooperatively and take turns with others; Begin to show accuracy and care when drawing. Safely use and explore a variety of materials, tools and techniques. Making observations and drawing pictures.

Working Scientifically In Key Stage 1

- 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.

Enrichment – Vegetable garden



Enrichment – Tractor Visit, Dentist, Vet and Paramedic visitors

Weather and Season work spans across the year so that these can be compared.

