

Science Learning Journey

YEAR 7

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 – SAW Trust Day

YEAR 6

Animals, including humans

Living things and their habitats

Changes to materials

Properties of materials

Forces

Earth and space

YEAR 5

Conservation



Electricity

States of matter



Enrichment – Norfolk Lakes Residential

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 – Crucial Crew safety

Across the school

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

YEAR 3

Animals, including humans- skeletons

Forces and magnets

Rocks

Plants

Working Scientifically

Light

YEAR 4

Animals, including humans- Digestion and teeth

Sound

Living things and their habitats

Enrichment – Beach Trip

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 – Africa Alive and Easton Farm

YEAR 2

Everyday materials- Building
Animals, including humans- all about animals

Animals, including humans- all about me
Plants

Exploring everyday materials
Seasonal changes

YEAR 1

Animals – Insects
Growing – Changing state of matter

Plants and animals – observational drawings, animals

Observations of the local environment
Seasonal Changes

YEAR R

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 – Forest school

Enrichment – Bug Parc. Swallow Aquatic minibeasts

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

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.



Looking after the environment

Animals, including humans

Living things and their habitats



Evolution and inheritance

Electricity

Light

Plants

Uses of everyday materials

Habitats from around the world

Living things and their habitats



Animals, including humans- health- Life Cycles

Enrichment – Forest School