

Subject:

Science

Aims/Intent

At Weston School we aim to provide all children with a broad and balanced Science curriculum that fosters a healthy curiosity in how our world works. Our Science teaching covers all National curriculum topics, enabling children to confidently explore and discover the world around them, ensuring they have a deeper understanding of the world we live in. Our curriculum is planned over a 2 – year cycle with knowledge and key skills mapped for each year group to ensure progression across the school. Through inclusion of a variety of teaching approaches we aim to develop children into independent, self-confident learners who want to challenge themselves. We value the importance of hands-on practical learning, that develops children's skills of explanation, prediction and analysis. We want our children to be confident asking questions and have a broad, scientific vocabulary and so language is taught and built on as topics are revisited across key stages.

The Weston 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.

Curriculum Content – School Year 2023-2024 (Year B)

Pupils in EYFS - See EYFS Curriculum page for information about Science taught (for example, as part of the Understanding the World area of learning).

Pupils in Years 1 and 2 will be taught the following units;

Autumn Term	Spring Term	Summer Term
Seasonal changes	Living things and habitats	Plants
Pupils will be taught the following skills:	Pupils will be taught the following skills:	Pupils will be taught the following skills:

• Observe closely, using simple equipment • Gather and record simple data to help in answering questions • Use observations and ideas to suggest answers to questions	• Observe closely, using simple equipment • Identify and classify • Use observations and ideas to suggest answers to questions	• Observe closely, using simple equipment • Identify and classify • Perform simple tests Use observations and ideas to suggest answers to questions
As significant key scientific skills, the following will also be taught to pupils in every unit of work throughout the year: • Ask simple questions and recognise that they can be answered in different ways		
Pupils will also re-visit learning from prior year groups to reinforce connections and to help them to truly master the learning. Pupils in Years 3 and 4 will be taught the following units;		
Autumn Term	Spring Term	Summer Term
Plants / Rocks	Light /Sound	Living things and their habitats
Pupils in Years 3 and 4 will be taught the following skills: • Set up simple practical enquiries, comparative and fair tests • Gather and record data in a variety of ways to help in answering questions • With help, use results to draw simple conclusions. • Use straightforward scientific evidence to answer questions or to support their findings • Use straightforward scientific evidence to answer questions or to support their findings	Pupils in Years 3 and 4 will be taught the following skills: • Set up simple practical enquiries, comparative and fair tests • Identify differences, similarities or changes related to simple scientific ideas and processes • Use straightforward scientific evidence to answer questions or support findings • Raise further questions	Pupils in Years 3 and 4 will be taught the following skills: • Make systematic and careful observations • Records and presents findings using drawings, labelled diagrams, keys, tally charts, Carroll diagrams, Venn diagrams, bar charts and tables • Use results to draw simple conclusions With support, raise further questions

As significant key scientific skills, the following will also be taught to pupils in every unit of work throughout the year:

- Years 3 and 4 - Ask relevant questions and use different types of scientific enquiries to answer them.

Pupils in Years 5 and 6 will be taught the following units;

Autumn Term	Spring Term	Summer Term
Evolution and Inheritance	Animals including humans	Light / Forces
Pupils in Years 5 and 6 will be taught the following skills: • Plan different types of scientific enquiries to answer questions • Record data and results with increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. • Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms • Identify scientific evidence that has been used to support or refute ideas or arguments	Pupils in Years 5 and 6 will be taught the following skills: • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables • Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeated readings when appropriate • Use test results to make predictions and to set up further comparative and fair tests	Pupils in Years 5 and 6 will be taught the following skills: • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables • Record data and results with increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. • Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms • Identify scientific evidence that has been used to support or refute ideas or arguments • Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeated readings when appropriate

		Use test results to make predictions and to set up further comparative and fair tests
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Pupils will also re-visit learning from prior year groups to reinforce connections and to help them to truly master the learning.

Curriculum Content – School Year 2024-2025 (Year A)

Pupils in EYFS - See EYFS Curriculum page for information about Science taught (for example, as part of the Understanding the World area of learning).

Pupils in Years 1 and 2 will be taught the following units;

Autumn Term	Spring Term	Summer Term
Humans	Everyday Materials	Uses of Materials
Pupils in Years 1 and 2 will be taught the following skills: - Observe closely - Use their observations and ideas to suggest answers to questions.	Pupils in Years 1 and 2 will be taught the following skills: - Observe closely - Identify and classify - Use their observations and ideas to suggest answers to questions.	Pupils in Years 1 and 2 will be taught the following skills: - Perform simple tests - Use simple equipment - Gather and record simple data to help in answering questions

As significant key scientific skills, the following will also be taught to pupils in every unit of work throughout the year:

- Ask simple questions and recognise that they can be answered in different ways

Pupils will also re-visit learning from prior year groups to reinforce connections and to help them to truly master the learning.

Pupils in Years 3 and 4 will be taught the following units;

Autumn Term	Spring Term	Summer Term
Animals including humans	States of matter / Forces and magnets	Electricity
Pupils in Years 3 and 4 will be taught the following skills: • Make careful observations. • Use straightforward scientific evidence to answer questions or to support their findings • Set up simple practical enquiries, comparative and fair tests • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Report on findings from enquiries, including oral and written explanations or presentations of results and conclusions.	Pupils in Years 3 and 4 will be taught the following skills: • Set up simple practical enquiries, comparative and fair tests. • Make systematic and careful observations • Make accurate measurements using standard units, using a range of equipment • With help, use results to draw simple conclusions. • Use results to suggest improvements • Set up simple practical enquiries, comparative and fair tests • Identify differences and similarities or changes related to simple scientific ideas and processes.	Pupils in Years 3 and 4 will be taught the following skills: • Set up simple practical enquiries, comparative and fair tests • Make systematic and careful observations • Gather and record data in a variety of ways to help in answering questions • Record and present findings, using drawings, labelled diagrams and tables.
As significant key scientific skills, the following will also be taught to pupils in every unit of work throughout the year: • Years 3 and 4 – Ask relevant questions and use different types of scientific enquiry to answer them.		

Pupils in Years 5 and 6 will be taught the following units;

Autumn Term	Spring Term	Summer Term
Earth and space	Living things and their habitats	Electricity / Properties of materials
Pupils in Years 5 and 6 will be taught the following skills: • Take measurements, using a range of scientific equipment, with increasing accuracy and precision • Take repeat readings when appropriate	Pupils in Years 5 and 6 will be taught the following skills: • Plan different types of scientific enquiries to answer questions • Records data and results of increasing complexity	Pupils in Years 5 and 6 will be taught the following skills: • Plan different types of scientific enquiries to answer questions • Recognise and control variables where necessary.

Identify conclusions, causal relationships and patterns	- Records and presents findings using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - Report on findings from enquiries in oral and written explanations - Identify conclusions, causal relationships and patterns.	- Take measurements, using a range of scientific equipment, with increasing accuracy and precision - Records and presents findings using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - Identify scientific evidence that has been used to support or refute ideas or arguments - Use test results to make predictions and to set up further comparative and fair tests.
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Pupils will also re-visit learning from prior year groups to reinforce connections and to help them to truly master the learning.