



SCIENCE CURRICULUM OVERVIEW

SCIENCE STATEMENT OF INTENT

At St Francis we aim to give all children a strong understanding of God's world whilst acquiring specific skills and knowledge to help them to think scientifically. We want them to gain an understanding of scientific processes and implications of Science, today and for the future. Our science curriculum is ambitious and inclusive for ALL children.

Scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding procedural knowledge into the long-term memory.

All children are encouraged to develop and use a range of skills including reading, observations, planning and investigations. They are encouraged to independently question the world around them and explore possible answers for scientific based questions.

Scientific vocabulary is explicitly taught and there is an expectation that children will use appropriate terminology. Effective questioning to communicate ideas is encouraged.

RECEPTION

AUTUMN TERM	SPRING TERM	SUMMER TERM
TOPIC- I wonder why the leaves are not green.	TOPIC- What happens to our world during Spring?	TOPIC- How do some living things grow?

KEY CONCEPT KEY STAGE 1 – We are young scientists!

- 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

Seasonal Changes - throughout the year.

During this topic children explore the four seasons and the changes that happen during the seasons. They explore the school grounds and find evidence of the changing seasons, for example plants growing in spring. They look at trees in all seasons to see the differences each season brings.

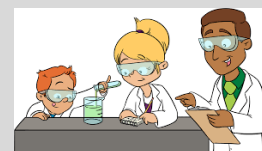
AUTUMN TERM	SPRING TERM	SUMMER TERM
Animals including Humans	Everyday Materials	Plants

YEAR 2

AUTUMN TERM	SPRING TERM	SUMMER TERM
Materials and their properties	Animals and Humans	Plants

KEY CONCEPTS KEY STAGE 2 – Developing Scientific Minds!

- 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
- 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.



YEAR 3

AUTUMN TERM	SPRING TERM	SUMMER TERM
Rocks and Fossils Forces & Magnets	Animals including Humans	Plants Light

YEAR 4

AUTUMN TERM	SPRING TERM	SUMMER TERM
Animals Including Humans Electricity	States of Matter	Sound Living things and their habitats.

YEAR 5

AUTUMN TERM	SPRING TERM	SUMMER TERM
Everyday Materials	Living things and their habitats Animals and Humans	Earth & Space Forces and magnets

YEAR 6

AUTUMN TERM	SPRING TERM	SUMMER TERM
Animals Including Humans Living things and their Habitats	Electricity Light	Evolution & Inheritance