Christ the King Catholic Primary School

Curriculum Design for Science

At Christ the King RC Primary School, we want our children to be enthused scientists! We want pupils at Christ the King to recognise and understand the importance of science in our daily lives through a practical, hands-on approach involving experiments and investigations, giving our children opportunities to be curious and test out their theories.

Intent

At Christ the King RC Primary School, we want our children to be enthused scientists! We want pupils at Christ the King to recognise and understand the importance of science in our daily lives through a practical, hands-on approach involving experiments and investigations, giving our children opportunities to be curious and test out their theories.

We aspire for our children:

- To develop their scientific knowledge and conceptual understanding
- To be equipped with the scientific knowledge and skills required to understand the uses and implications of Science today and for the future
- To develop a sense of excitement and curiosity about the world around them
- To build upon the learning and skill development of the previous years

Being a (Scientist) at Christ the King

Implementation

At Christ the King, we follow United Learning's Science - an aspirational, fully joined and coherent programme that supports and nurtures our curious pupils. The programme we follow is designed to build the knowledge and skills needed to spark imagination, fuel curiosity, and nurture confident young scientists. Science lessons are taught weekly throughout Key Stage 1 and Key Stage 2. Children in Early Years are exposed to 'Understanding the World' through exploring the natural world.

Impact

At Christ the King, we celebrate success through our science curriculum when children will:

- Have developed skills through science as a process of enquiry
- Have developed enthusiasm for scientific learning and discovery
- Have developed their understanding of nature and the world around them
- Be equipped with the scientific knowledge required to understand the science for today and for the future

Science 2024-2025 Overview

	Reception	Y1/2 Cycle A	Y1/2 Cycle B	Y3	Y4	Y5	Y6
Autumn 1		BIOLOGY Plants – shortened version (4 lessons)	BIOLOGY/PHYSICS Seasonal changes – shortened version (4 lessons)	CHEMISTRY Rocks – shortened version (4 lessons)	BIOLOGY Classifying organisms – full version (6 lessons)	CHEMISTRY Separating mixtures – full version (6 lessons)	PHYSICS Electricity – shortened version (4 lessons)
Autumn 2		BIOLOGY Plant growth – shortened version (4 lessons)	CHEMISTRY Everyday materials – full version (6 lessons)	PHYSICS Light – Full version (6 lessons)	BIOLOGY Food and digestion – shortened version (4 lessons)	PHYSICS Energy – shortened version (4 lessons)	BIOLOGY Evolution – shortened version (4 lessons)
Spring 1		BIOLOGY Animals – shortened version (4 lessons)	BIOLOGY Humans – shortened version (4 lessons)	BIOLOGY Organisms – shortened version (4 lessons)	CHEMISTRY Particle model & States of matter – full version (6 lessons)	BIOLOGY Life cycles – shortened version (4 lessons)	PHYSICS Light – full version (6 lessons)
Spring 2	Spring into out step (wildlife, weather and habitats around the school)	BIOLOGY Needs of animals – shortened version (4 lessons)	CHEMISTRY Uses of materials – shortened version (4 lessons)	BIOLOGY Plants – shortened version (4 lessons)	PHYSICS Sounds – shortened version (4 lessons)	BIOLOGY Human development – shortened version (4 lessons)	BIOLOGY Further classification – shortened version (4 lessons)
Summer 1		CHEMISTRY Uses of materials – shortened version (4 lessons)	CONSOLIDATION AND REVIEW	PHYSICS Forces & Motion –Full version (6 lessons)	PHYSICS Electricity – shortened version (4 lessons)	PHYSICS Forces – shortened version (4 lessons)	BIOLOGY Functions of the human body – full version (6 lessons)
Summer 2	Science detectives (properties of materials and habitats around the world)	BIOLOGY Living things and their habitats – shortened version (4 lessons)	CHEMISTRY Solid, liquid and gases – full version (6 lessons)	PHYSICS Magnetism – shortened version (4 lessons)	CHEMISTRY Properties of materials – shortened version (4 lessons)	PHYSICS Earth and space – full version (6 lessons)	CHEMISTRY Physical and chemical changes – shortened version (4 lessons)

Working scientifically

KS1	LKS2	UPKS2
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.	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.	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 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.