

Intent: What do we want our children to learn?

At Tregoze Primary School we want our children to be confident and curious scientists who understand the key concepts of biology, chemistry and physics and can apply their scientific skills and understanding to real-life contexts, including global issues such as climate change.

Throughout our science curriculum we seek opportunities to enhance the children's science capital: the sum of their science knowledge, attitudes, values, experiences and resources, in order that they understand the transferability of scientific skills to open doors to many careers.

Science: all summed up!



Implementation: How do we achieve this at Tregoze?

Sequence of learning

Our curriculum is carefully mapped to ensure that children can build on their prior skills and knowledge. Each lesson begins with a low-stake recap exercise to help the children recall key facts from the current and previous units of study. Knowledge organisers are used to provide a summary of what should be learned by the end of each unit.

Skills

It is important that the children develop the ability to work scientifically throughout their time at Tregoze. In science, pupils learn to plan enquiries, observe carefully, record outcomes in multiple forms, draw conclusions based on evidence and evaluate their own work and the work of other scientists.

How it is taught

In science lessons we encourage children to 'Think, Talk and Do' science, providing opportunities for hands on practical investigation as well as discussion and reasoning opportunities where they can hypothesise and form their own lines of enquiry. Wherever possible, a real-life context is given for the lesson, enhancing the children's science capital.

TREGOZE PRIMARY SCHOOL SCIENCE OVERVIEW						
	Autumn term		Spring term		Summer term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Plants	Animals including humans	Everyday materials		Seasonal Changes	Animals including humans
Year 2	Animals including humans		Everyday materials and their uses		Living things & their habitats	Plants
Year 3	Forces & Magnets	Animals including humans	Plants		Rocks	Light
Year 4	Sound	Electricity	Living things & their habitats	Animals including humans	States of matter	
Year 5	Properties and changes of materials		Space	Forces & Mechanisms	Living things & their habitats	Animals including humans
Year 6	Light	Animals including humans	Living things & their habitats	Electricity	Evolution & Inheritance	

Working Scientifically
Planning, Observing, Recording, Concluding, Evaluating

BBG IDEAS: Biology, Chemistry, Physics

		KS1		Lower KS2		Upper KS2	
		Y1	Y2	Y3	Y4	Y5	Y6
WORKING SCIENTIFICALLY	PLAN	Planning	<ul style="list-style-type: none"> asking simple questions and recognising that they can be answered in different ways 	<ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests 	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 		
	DO	Observing	<ul style="list-style-type: none"> observing closely, using simple equipment performing simple tests identifying and classifying 	<ul style="list-style-type: none"> making systematic and careful observations and where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers 	<ul style="list-style-type: none"> taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate 		
	Recording	<ul style="list-style-type: none"> gathering and recording data to help in answering questions 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs 			
REVIEW	Concluding	<ul style="list-style-type: none"> using their observations and ideas to suggest answers to questions 	<ul style="list-style-type: none"> reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings 	<ul style="list-style-type: none"> 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. 			
	Evaluating		<ul style="list-style-type: none"> using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<ul style="list-style-type: none"> using test results to make predictions to set up further comparative and fair tests. identifying scientific evidence that has been used to support or refute ideas or arguments 			

Impact: How do we know?

Children should leave Tregoze with the scientific knowledge, skills, understanding and vocabulary needed to shape their future.

They should be able to ask questions, plan enquiries and evaluate their findings, and show an awareness that scientific understanding is an evolving process.