

# Curriculum Intent

At Zouch Academy, we immerse our children in a Science curriculum that combines **knowledge and vocabulary** with practical Science **skills** to enable them to be curious and gain a detailed **understanding** about the scientific world around them. Children have the opportunity to learn in a series of ways to nurture our diverse range of learners and promote independent scientific thinking. This includes through practical investigations and exploration, undertaking varied research and observation of the environment and of key Scientific phenomena occurring (such as materials changing states).

Our teaching is intended to ensure that children are provided with a variety of skills to help structure their understanding of the key areas of the Science Curriculum: chemistry, biology and physics for years 1-6 and Understanding the World for EYFS.



# Curriculum Implementation

Science forms part of our outer curriculum at Zouch. At Zouch, we ensure our teaching follows a purposeful progression through the careful sequencing of Science units to allow our learners to draw on their knowledge across the curriculum. Where appropriate, Science learning is matched and complemented by the knowledge of other curriculum areas to allow this to further support children.

Throughout the course of their learning, children will be immersed in a range of Scientific **vocabulary** to help build oracy within and across their year groups. Children will be taught with a focus on both subject-specific vocabulary that links to each module of learning and vocabulary that structures a framework for their skills of Working Scientifically.

Our model of teaching encourages children to revisit and build upon previous learning to help embed and extend their **understanding** across the Science curriculum.

# Curriculum Impact

The implementation of this curriculum ensures that when all children leave Zouch Academy, they have gained a rich understanding of Primary Science that they can draw upon in future learning. In addition, they will also be able to:

- Think scientifically by finding different ways to answer questions
- Generate their own ideas on how best to answer Scientific enquiries
- Gather and record their own evidence from practical Science opportunities
- Ask meaningful questions to further their own understanding of Science as a core subject.

# Assessment

Teachers will assess Science skills using the Teacher Assessment of Primary Science (TAPS) framework once termly and via end of unit glossary to assess knowledge and vocabulary. Together, these assessments will inform a judgement on the child's overall understanding of a unit of Science. This is reported to parents at the end of the year and at the end of Key Stages as part of the Statutory Assessment process.



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

Our values

Our values