

Curriculum Statement of Intent

Teaching and learning of: Science



NTEXT	<p>At Thorpe Primary Academy, we want to spark imagination, fuel curiosity and nurture confident young scientists. We believe that investigational and experiential science is central to developing young scientists and therefore we focus primarily on working scientifically skills. Our curriculum is designed to progressively develop knowledge and skills which empower children to ask and explore increasingly more complex questions, encouraging our children to recognise the importance of science in the world around them. Ultimately, our goal is to ensure that we nurture children who are engaged, motivated and curious learners who are interested and invested in the world around them. We want children to leave us in Year 6 knowing that regardless of gender, culture and background they can access and thrive in a range of scientific careers.</p>			
Underpinned by	<p style="text-align: center;">Vocabulary</p> <p>Pupils will be exposed to, and become confident in the use of, scientific vocabulary. Scientific vocabulary is explicitly shared, clarified and modelled within each unit. Pupils are then actively encouraged to use the vocabulary accurately in their verbal and written work.</p>	<p style="text-align: center;">Knowledge</p> <p>At Thorpe Primary Academy, we use United Learning as a knowledge base tied to the National Curriculum. This is supplemented with whole-school Science Days focusing on relevant and engaging themes, e.g. Space. Our science curriculum incorporates physical, biological and environmental sciences e.g. the study of materials, habitats, food chains, our changing world, wildlife protection and growth etc. Each unit of work recaps and then builds on prior learning so that all pupils are able to secure and embed their scientific knowledge as they move through the school.</p>	<p style="text-align: center;">Scientific Skills</p> <p>Teachers will ensure pupils are competent in the scientific skills needed to:</p> <ul style="list-style-type: none"> - Ask questions. - Carry out comparative and fair tests. - Gather data, record and report findings. - Look for naturally occurring patterns and relationships and draw conclusions, including identifying and classifying based on results. - Conduct research using secondary sources 	<p style="text-align: center;">Questioning</p> <p>Each class conducts a minimum of one scientific investigation per half term, with an emphasis on the planning, carrying out and recording of each investigation. This encourages the children themselves to begin to question their own understanding. Teachers use targeted questioning to guide the children in their own explorations, rather than giving 'answers' to the investigations.</p>

IMPLEMENTATION	SEND	Scientific Skills	Sharing information
	The Science curriculum is adapted to meet the needs and styles of all learners. A variety of teaching and learning strategies are used to ensure that all pupils are exposed to scientific knowledge and skills.	As experiential science is central to developing young scientists, we equip children with the scientific skills on which to build their knowledge through investigation.	Children are equipped with the skills needed to communicate scientific information in a variety of ways e.g. sketches, diagrams, graphs and charts. Children are also encouraged to write up their investigations at length and with purpose.
	Investigations	Questioning	Enriching opportunities
	Each class conducts a minimum of one scientific investigation per half term, with an emphasis on the planning, carrying out and recording of each investigation. This enables children to base their learning on first-hand experiences.	Questioning provokes thought and motivates the children to discover answers through exploration and research.	Whole-school Science Days focusing on relevant and engaging themes, e.g. Space, provide opportunities for children to explore their impact on the world around them and what they can do to help our planet. Children to have the opportunity to participate in competitions, meet scientific experts and go on visits. There will be staff collaboration with science department at Jack Hunt to facilitate some of the above.

IMPACT	Children will have developed the scientific knowledge and skills to help them explore, navigate and understand the world around them and their place in it. Children's knowledge and skills will develop progressively as they move through the school, not only to enable them to meet the requirements of the National Curriculum but to inspire them to develop a curiosity and a deeper understanding about the world they live in. Children will be excited and enthused about sharing their learning with others.		
	Pupil Voice	Evidence in knowledge and skills	Breadth and depth
	Pupils will be given opportunities to feedback on their experiences in science through discussions and surveys. Success is judged on whether children are positive, confident and actively engaged in science.	Pupils can successfully evidence their learning in end-of-unit assessment activities. They are able to effectively communicate their knowledge via oral or written feedback and can successfully collect and analyse their findings through investigations.	The curriculum builds year on year to ensure children can recap on and embed learning before building in new knowledge and skills.