

- **Priority: Science & Forest School**

Subject Leaders:

Jade O'Regan & Maxine Humphries 2024-2025

Maintenance targets and strengths:

- The quality of education provided at our school is exceptional and senior leaders ensure that the school's curriculum intent is embedded securely and consistently throughout the school. Each curriculum journey has been planned to enable pupils to develop their skills, knowledge and understanding as they move from Nursery through to the end of key stage 1. The science curriculum in an exciting, stimulating and vibrant way of making cross-curricular links to other subjects and utilising enrichment opportunities, such as high-quality workshops and educational visits.
- The curriculum is planned within the context of the Early Years Foundation Stage Framework (EYFS) and the national curriculum and has been carefully planned and sequenced, allowing coherent progression towards defined end points and equipping pupils well for their next stages in education. Teachers provide adapted learning experiences to ensure all pupils can access learning, to achieve high standards in science so that the proportion of pupils achieving the expected standard in Year 2 matches or exceeds the national average.
- Formative assessment enables teachers to adapt their planning and identify pupils at risk of falling behind. Accurate teacher assessment helps identify and address pupils' needs.
- Subject leaders continue to monitor the delivery of the curriculum with a focus on vocabulary development and supporting the lowest 20%. They ensure that a wide range of high quality, attractive resources are available to support children in the learning, including technology. The subject leader continues with a robust monitoring schedule, including:
 - observations of teaching and learning
 - planning scrutiny
 - work sampling
 - moderation of teacher assessments
 - activities to seek the views of pupils
 - monitoring of displays.

Development Targets:

- Review and reshape the curriculum where necessary across the school to ensure coverage, consistency and progression including vocabulary.
- Develop pupils' language skills so that they have a wide scientific vocabulary and can express themselves confidently.
- To continue to implement learning and activities as part of our Woodland Trust Platinum Award to engage pupils in outdoor learning to boost their well-being.
- New Forest School leader to complete Forest School training.
- New Forest School leader to feel confident in delivering the Forest School curriculum and cascading to colleagues.
- Continue to run Forest School activities to boost wellbeing of all Year 1 pupils.
- Forest School or outside learning to begin in Year Two to boost wellbeing of all Year 2 pupils.
- To explore 'Crest' awards as part of science week March 2025.
- Engage with the pupils to explore the schools new solar panel scheme and what it means for the school and the environment.
- To plan whole school investigations to raise the profile of the 'Working Scientifically' skills which are found in the key stage 1 national curriculum. The whole school investigations will show the progression of how each year group collates and records their data/results.

Key priorities in SIP 2024/25:

Priority 1 – Continue to ensure that all pupils, including those with special educational needs and disabilities (SEND) and the lowest 20%, achieve as highly as possible across all areas of the curriculum, with particular focus on science and on streamlining our curricula intent and implementation to embed lifelong learning skills while ensuring that children have increased opportunities to learn practically and through play.

Priority 2 – Continue to ensure that the well-being needs of our children are met to the highest degree by further enhancing the strong provision for our pupils with SEND and advancing and prioritising well-being throughout the school community.

Science Action Plan 2024-2025		
Observations	Planned date	Date achieved
Nursery Reception Year 1 Year 2	Spring 1 Spring 1 Summer 1 Summer 1	
Monitoring planning	Planned date	Date achieved
Nursery Reception Year 1 Year 2	On-going throughout the year	
Pupil voice / book discussion	Planned date	Date achieved
Nursery Reception Year 1 Year 2	On-going throughout the year	
Moderation	Planned date	Date achieved
Nursery Reception Year 1 Year 2	Spring 1 Spring 1 Summer 1 Summer 1	

Development Targets:					
Target	Input, activities and tasks	Timescale	Cost / budget heading / resources	Monitoring	Success Criteria
PRIORITY 1: Continue to ensure that all pupils, including those with special educational needs and disabilities (SEND) and the lowest 20%, achieve as highly as possible across all areas of the curriculum, with particular focus on science and on streamlining our curricula intent and implementation to embed lifelong learning skills while ensuring that children have increased opportunities to learn practically and through play.	To monitor and assess children’s progress after each unit of work and address any gaps.	September 2024 – throughout the year	Staff time	Science curriculum leads Class teachers	Gaps identified and addressed.
	Whole school investigations. To plan whole school investigations to raise the profile of the ‘Working Scientifically’ skills and support the children with developing these inquiry skills which are part of the key stage 1 national curriculum. The whole school investigations will highlight the progression of how each year group collates and records data/results. To explore ‘Crest’ awards (inquiry-based project work) as part of science week March 2025.	September 2024 – throughout the year	Staff time Ordering of resources	Science curriculum leads Class teachers	Pupils have the opportunity to carry out practical investigations in science that help them to develop their scientific skills. Pupils have the opportunity to carry out many different types of investigation throughout their science learning. Pupils develop a sense of awe and wonder about the world around them and are excited about their science learning. All staff are aware of the ‘Crest’ awards and successfully implement scheme to enhance children’s science provision.
	Share in staff meeting the HFL Working scientifically building blocks EYFS - KS2 and Progression in working scientifically skills.	September 2024	Staff meeting time	Science curriculum leads Class teachers	Teachers feel confident in planning lessons/investigations in which enables the pupils to develop their scientific inquiry skills.

	Teachers to identify the working scientifically skills that are being taught in each lesson and modify the science curriculum journey accordingly.				Teachers feel confident in assessing the pupils' scientific inquiry skills.
	Teachers to share key vocabulary with classroom support staff at the start of a new unit of work to ensure all staff are using the same vocabulary with pupils. Revisit all key vocabulary to ensure it matches the key learning.	September 2024 – throughout the year	Staff time	Science curriculum leads Class teachers	Children have a deep understanding of key vocabulary and can use it accurately.
	Through lesson observations, make sure the key learning is streamlined, and tighter and direct teaching is very focused, specific and time measured. Direct teaching on the carpet to be reduced to the minimum requirement (twice the child's age as a guideline)	September 2024 – throughout the year.	Staff time	Science curriculum leads Class teachers	Effective learning happening during science lessons. Pupils are not just attending to direct instruction or doing the activities planned but are substantively <i>engaged</i> as they do so. The pupils put forth cognitive effort, actively participate, and commit to the task. All pupils including those with SEND have the opportunity to learn without the barrier of having to focus for long periods of time.
	All staff to model specific and correct vocabulary to pupils.	September 2024 – throughout the year	Staff time	Science curriculum leads Class teachers	Pupils have a deep understanding of key vocabulary and can use it accurately.
	To utilise outside areas including the woodland area during science lessons for effective and engaging learning.	September 2024 – throughout the year	Staff time School budget	Science curriculum leads Class teachers	Pupils develop a sense of awe and wonder about the world around them and are excited about their science learning.

	<p>New Forest School leader to complete Forest School training.</p> <p>New Forest School leader to feel confident in delivering the Forest School curriculum and cascading to colleagues.</p> <p>Forest school/ outside learning to be rolled out into Year 2.</p> <p>All year groups have at least one local walk in the area of the school per year and clearly identify which learning objectives are met by the walk.</p> <p>Work towards Woodland Trust Platinum Award to engage pupils in outdoor learning to boost wellbeing.</p>				<p>Pupils' well-being is boosted.</p> <p>Pupils develop an appreciation and respect for the natural world.</p> <p>Pupils including those with SEND make good progress in science and develop their knowledge and understanding as they are experiencing/observing science in real life and not just through a textbook.</p> <p>Benefits of learning outside:</p> <ol style="list-style-type: none"> 1. Improved mental health and well-being. 2. Opportunities for social interaction and collaboration. 3. Promotion of physical health. 4. Increased motivation and self-direction. 5. Support for STEM skills. 6. Reduced stress and symptoms of ADHD. 7. Improved relationship with nature. 8. Enhanced curriculum learning. 9. Healthier immune systems.
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Review –					
PRIORITY 2: Continue to ensure that the well-being needs of our children are met to the highest degree by further enhancing the strong provision for our pupils with SEND and advancing and prioritising well-being throughout the school community.	To utilise outside areas including the woodland area during science lessons for effective and engaging learning.	September 2024 – throughout the year	Staff time School budget	Science curriculum leads	All pupils demonstrate improved mental health and well-being.
	New Forest School leader to complete Forest School training.			Class teachers	
	New Forest School leader to feel confident in delivering the Forest School curriculum and cascading to colleagues.				
	Forest school/ outside learning to be rolled out into Year 2.				
	All year groups have at least one local walk in the area of the school per year and clearly identify which learning objectives are met by the walk.				
To continue to implement learning and activities as part of our Woodland Trust Platinum Award to engage pupils in outdoor learning to boost their well-being.					
Nature and Nurture Week for the children to include a yoga workshop, mindfulness activities and promotion of a good understanding of healthy choices.					
Review -					

Maintenance Targets:					
Staff CPD	Attend science conference.	Summer 2024	Staff time	Science curriculum leads	New science curriculum leaders develop CPD and ideas to take forward for the next academic year.
	Attend Stevenage subject leader cluster meetings to share resources, ideas and best practise, build links, share strengths and areas for development and encourage collaborative working.	Spring 2024	Staff time	Science curriculum leads	Staff to be fully up to date and informed on current science issues. Cascade to staff.
	Engage children with new solar panel project. Explain to the children what is going to happen and what it means for the school and the environment.	Autumn 2024	Staff time	Science curriculum leads	Good practice shared.
Review -					
To achieve good quality assessment data to show progress made in science using Hertfordshire's Phases/ steps model	Input data on to Arbor each term. Analyse data from Year 2 end of year scores.	Throughout year	Staff time	Science curriculum leads	Children working at ARE as in line with national average. The science leads to have a clear picture of science progress. Share with science governor who holds science leads to account of progress made.
Review –					
Monitor and evaluate effective teaching and learning of the Science curriculum across the school, ensuring that	Review spiralled science curriculum and working scientifically skills.	November 2024 staff meeting	Staff time	Science curriculum leads	Observations of good quality science teaching.

the curriculum is progressive, engaging, and creative and meets pupils' needs.	Planning – embedded throughout key stage 1 using a robust spiralled curriculum journey with a focus on the working scientifically skills.	November 2024 staff meeting	Staff time	Science curriculum leads Class teachers	Good quality planning.
	Organise timetable for observations in all year groups.	September 2024	Staff time	Science curriculum leads	Teaching is good or better in all science lessons.
	Book look with staff checking against national curriculum criteria.	Spring 1 2025	Staff meetings	Science curriculum leads	Strong evidence of curriculum coverage.
Review –					

Track vulnerable groups such as PPG, SEND, EAL to show progress made in Science under the Hertfordshire's Phases/ steps model.	Teachers to input science data on a termly basis to track progress using Arbor.	Throughout year.	Staff time.	Science curriculum leads.	Progress data indicates that rapid progress is being made with our vulnerable groups and closing the gap between PPG / non-PPG, SEND /non SEND, EAL /non EAL groups.
Review –					
Plan and deliver science weeks to whole school.	Generate ideas for science activities to staff for National Science Week in March 2025.	Spring 2025	National Science Week free resources	Science curriculum leads	Children to gain a rich and creative curriculum based on the topic of growth.

				All staff to deliver science week activities	
	Plan to use 'Crest' awards and roll out to staff to use during science week.	Spring 2025	Staff meeting	Science curriculum leads All staff to deliver science week activities	Children to gain a rich and creative curriculum developing scientific inquiry skills.
	Plan and deliver whole school 'Nature Nurture' week in October 2024.	Autumn 2024	Staff time	Science curriculum leads All staff to deliver science week activities.	Children to gain a rich and creative curriculum based on the topic of 'Healthy Bodies and Healthy Minds'
	As part of science week, plan a whole school STEM Day focusing on performing simple tests and recording data.	Autumn 2024	Staff time	Science curriculum leads. All staff to deliver science week activities.	Pupils have the opportunity to carry out practical investigations in science that help them to develop their scientific skills. Pupils have the opportunity to carry out many different types of investigation throughout their science learning. Pupils develop a sense of awe and wonder about the world around them and are excited about their science learning.
Review –					
Activities to attain the Woodland Trust Platinum challenge will be incorporated into cross-curricular planning.	Science leads to plan timetable for outstanding items to complete the Woodland Trust Platinum Award.	Spring 2025	Staff time	Science curriculum leads	All year groups to participate in activities to contribute to the achievement of Platinum challenge accreditation.

Review –					
Pupil voice	What do children enjoy/find difficult about science?	On-going	PPA/SL time CT feedback	Science curriculum leads	Staff identify and respond to areas of difficulty for children. Children contribute to school Science display in hall.
	Pupil voice sessions used as an opportunity to discuss and monitor knowledge of key vocabulary across year groups.	On-going	Pupil voice notes	Science curriculum leads Year group leaders	Pupils demonstrate a secure knowledge and understanding of the key vocabulary they have been taught. They are able to articulate what they know and what it means.
Review					
Science displays	Whole school and class science display boards created and updated regularly.		Science leads Whole school display CT class displays	Science curriculum leads	Science and Forest School displays to celebrate children's learning.

	<p>Learning wall displays to include 'word walls' listing key vocabulary for the unit of work being taught and on-going key vocabulary. Staff to refer to the 'word walls' to engage pupils and discuss word meanings, spellings, etc.</p>	<p>On-going</p>	<p>Display boards Key vocabulary documents</p>	<p>Science curriculum leads. Year group leaders</p>	<p>Pupils are immersed in the key vocabulary they need to know and understand. They are given opportunities to talk about new vocabulary and discuss word meanings.</p>
<p>Review –</p>					