

THE VAYNOR CURRICULUM

SCIENCE ONE PAGE OVERVIEW

"Inspired to be the best that I can be!"



INTENT:



Love for Learning:

Children will develop a love for science and discovery. They will show curiosity to explain the world around them. Children will learn systematic ways to approach answering their own questions, become problem solvers and build resilience when approaching tasks and investigations.



Enquiring Minds:

Children will build strong scientific enquiry skills. They will now how to ask questions, observe, predict, measure, classify and communicate their learning in science.



World Wise:

Children will understand and respect the world in which they live. They will know how to take care of and sustain it. They will have a fascination for it that will remain with them for the rest of their lives.

To ensure progression throughout each year group, Science has been mapped into themes. By doing this, our children build on previous scientific knowledge and skills taught and each year they see how these relate to each theme.

CORE CONCEPTS IN SCIENCE

Working Scientifically	Biology	Physics/Chemistry
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VAYNOR VALUES	LEARNING SUPERPOWERS 	
RESPECT		
HONESTY	Challenge Taker	Motivation
KINDNESS	Resilience	Independence
FORGIVENESS	Confidence	Creative
HAPPINESS	Empathy	Inquisitive

IMPLEMENTATION:

Through studying Science, children learn systematic ways to approach answering their own questions, become problem solvers and build resilience when approaching tasks and investigations. Children begin to understand the huge role Science must play in our ever-developing world. The knowledge and skills they develop over the curriculum will inspire them to want to continue their scientific journey and become the change of the future.

How Science is mapped across the school:

OUR BIG IDEAS

Term	EYFS	Year 1	Year 2	Year 3	Year 4
Autumn	Seasonal Changes	Materials Seasonal Changes	Materials	Forces & Magnets Rocks	Electricity Sound
Spring	Habitats	Animals inc Humans Seasonal Changes	Plants Animals inc Humans	Plants Animals inc Humans	Living Things & Habitats Animals inc Humans
Summer	Animals & Plants	Animals Seasonal Changes	Living Things & Their Habitats	Light	States of Matter

Approach to Learning:

The curriculum is mapped using the core concepts. Lesson content is planned towards these as progression points and considers children's prior knowledge. It follows a model of direct instruction and explanation, questions and discussion, models, analogies, and other representations to help children acquire, organise and remember scientific knowledge. Children are also provided with practical 'hands on' experiences and reading activities to gain further knowledge. Science is taught weekly for an hour per lesson. In addition to this, there are links within PE and PSHE. The Science lessons are predominantly discrete to enable focus on the knowledge for each area and concept, although vocabulary is continually developed. To ensure our intent transfers into everyday classroom practice, we use current research in cognitive science to develop pedagogy and specific CPD to ensure subject content is expertly delivered.

Approaches to Recording:

- WALTs and steps to success
- Photographs and digital recordings.
- MAC
- LAC writing opportunities



Monitoring:



- ✓ Planning scrutinies, pupil discussions and lesson observations
- ✓ Staff CPD
- ✓ Evaluation and reflection sessions of CPD and curriculum

IMPACT:

Science Specific Impact Measures

Observation, questioning and discussion is used as a method of assessing pupils scientific skills and knowledge. Retrieval practice tasks are used in and across lessons to consolidate previous learning. Writing opportunities provide assessment of knowledge across the curriculum.

Tracking and Recording Assessments

We use NC school trackers half termly to input teacher judgements for each pupil. This allows us to see trends and comparisons between groupings and to tailor future provision.

