

MVFS Natural World Curriculum

Intent

At MVFS, we understand that having a secure knowledge of science empowers our children to confidently explore, discover and reason about their surroundings; and to develop a deeper understanding of the world they live in. As part of Understanding the World, our Natural World Curriculum seeks to instil a genuine curiosity about the world – encouraging our children to keep asking “Why... ?” and giving them the knowledge, skills and confidence to find answers to their questions and to gather evidence for their ideas.

We want our children to become lifelong learners, and to have no limits to their ambitions and aspirations. We want them to feel empowered by their knowledge, and to grow up believing that they can follow their passion and become farmers, vets, engineers, research scientists...

Our Key Aims: At MVFS, we strive to...

- inspire a deep interest and curiosity about the world, which continuously drives our children to want to find out and understand more.
- encourage respect for all living things and instil a sense of responsibility in our children as custodians of our fragile planet and its finite resources.
- promote the role that science plays in all aspects of our lives, and the wide range of future learning and career opportunities it presents.
- provide exciting hands-on experiences which make learning more meaningful and memorable and encourage questioning and discussion.
- provide knowledge and experiences that may challenge our children’s preconceived ideas about the world and stimulate a sense of wonder, excitement and a desire to learn more.
- develop a range of scientific enquiry skills; including carrying out simple investigations, gathering and interpreting data, forming conclusions, and identifying evidence to support or refute ideas.
- develop the ability to communicate scientific knowledge and understanding clearly in a variety of ways, using appropriate terminology and scientific vocabulary.



Implementation

At MVFS we have devised a bespoke curriculum which is carefully sequenced and interconnected; and which enables our children to develop their scientific knowledge and understanding as they move through our school. Our Natural World Curriculum is organised in a two year cycle, with topics of study being reviewed collaboratively by our teaching team at the end of each cycle.

As with all areas of our curriculum, it is important to remember that all of our children have significant gaps in their learning due to the experiences that have brought them to MVFS – indeed, all of our children have not been able to access the full curriculum for at least a year before joining us. As explained in our Curriculum Policy, this means that many of our children are working at a level below their chronological age whilst we support them to re-engage with education and enjoy high levels of interest and success, which help them to rebuild their self-esteem and start to value their own social and academic achievements. In order for our children to know more and remember more, prior learning is always considered; and opportunities for the revision of knowledge, skills and vocabulary are built into all lessons.

Stage One:

- In Stage One our children learn about human body parts (including senses) as well as sorting, comparing and classifying creatures from across the animal kingdom. They investigate the structure and function of flowering plants; and go on to explore the interdependency of living things in various habitats, and how these relationships are reflected in food chains. The children learn to identify and name a range of materials, and carry out simple comparative tests to explore a range of basic properties. Throughout all of the topics studied, our children are encouraged to work scientifically – questioning, observing, gathering and recording evidence and starting to identify patterns and form conclusions.

Stage Two:

- In Stage Two our children begin to look more deeply at the units studied so far to expand their knowledge of animals and plants. Topics such as electricity, magnetism and light provide lots of scope for practical investigations – building on prior learning and experiences to form predictions and carry out comparative tests. The children are also supported to start using different types of scientific enquiry to answer questions (including fair testing) and to make systematic observation and measurements to identify similarities, differences and changes.

Stage Three:

- Stage Three continues to build on the previous stages and enables the children to further embed and extend their knowledge and skills. New topics are also introduced and explored; including Space, Adaptation and Reversible and Irreversible Changes. The children are also given greater opportunities and independence when working scientifically to answer questions and test ideas; and are encouraged to use their broader knowledge and understanding of the world to make predictions and find evidence to prove (or refute) suggestions and theories.

Natural World – Cycle A

	Stage 1	Stage 2	Stage 3
Block 1	Human Body & Senses	Electricity	Lifecycles
	Health & Hygiene	Magnets	Diet, Drugs & Lifestyle
Block 2	Plants	Skeletons & Movement	Habitats
	Wildlife	Nutrition & Food Waste	Variation
Block 3	Materials	Classifying Living Things	Electricity
	Growing & Cooking	Habitats	Plant Reproduction
Block 4	Living Things, Habitats & Diets	Fossils	Space
		Light	Light

Natural World – Cycle B

	Stage 1	Stage 2	Stage 3
Block 1	Grouping Animals	Digestive System	Materials
	Caring for the Planet	Rocks	Circulatory System
Block 2	Animal Survival	States of Matter	Forces
	Animal Lifecycles	Forces	
Block 3	Materials	Sound	Changes
		Soil	Fossils
Block 4	Blubs & Seeds	Plants	Lifecycles & Gestation
	Plants	Food Chains	Adaptation

The bespoke nature of our setting means that, in addition to the topics outlined above, our children are also engaged in lots more learning about plants, animals and the environment as part of their daily farm activities and weekly Forest School sessions. Our children also benefit from participating in National Science Week and other science enrichment opportunities throughout the year.

Impact

Through our bespoke approach and quality first teaching, we will see the impact of this subject in different ways. Our children will be engaged in lessons about the natural world and will want to find out more. They will be able to talk about and demonstrate the knowledge, skills and vocabulary that they have acquired; and will show increasing levels of enquiry, flexibility, independence and precision when working scientifically. Ultimately, our children will be empowered by their growing scientific knowledge to explore and discuss the world; and will appreciate how they can have a positive impact upon it.