

Science: Curriculum Intent

Here at Shustoke, our intention is that every pupil, irrelevant of needs, develops such a passion for Science that they harness their natural excitement and curiosity and in turn this inspires them to pursue scientific enquiry. We wish that every child is excited by scientific ideas and wants to learn to explain and analyse phenomena, make predictions and solve problems.

Through Science, we aim to support this philosophy by:

- investigating key questions
- learning how science works
- discovering why science matters in the world
- enabling children to build up a body of key knowledge and an understanding of key scientific concepts through investigation
- enabling children to apply their scientific understanding to rationalise and explain new phenomena
- developing a sense of excitement and curiosity about science and natural phenomena.

At our school we know that children learn best when the curriculum is well sequenced to enable revisiting of core skills, knowledge and understanding to deepen conceptual awareness before demanding application across the whole curriculum.

Our Long Term Plans outline how the key skills, knowledge and understanding are developed, revisited, assessed and built upon from the learning in EYFS then during Year 1 to Year 6. Our Science curriculum meets the requirements of the EYFS goals and the NC programmes of Study.

Our high quality Science curriculum allows pupils to gain factual knowledge through the three key areas of biology, chemistry and physics. Through our Science curriculum, our pupils acquire a range of scientific skills, embed vocabulary and build upon prior knowledge.

Throughout the school, pupils will enjoy a range of Science units of work:

| Year Group | AUTUMN | SPRING | SUMMER |
|------------|--|---------------------------------------|--|
| EYFS | All about Me | Amazing Animals | Materials |
| Y1 | Animals including humans | Materials | Plants |
| Y2 | Materials | Animals including humans Plants | Living Things and their habitats |
| Y3 | Rocks Forces and Magnets | Animals including Humans | Plants Light |
| Y4 | Living things and their habitats States of Matter | Animals including humans | Sound Electricity |
| Y5 | Properties and changes of Materials | Forces Earth and Space | Living things – life cycles Animals including Humans |
| Y6 | Living things – classification Electricity | Evolution Animals including Humans | Light |

An integral part of our Science curriculum is real life context, which links to the contribution of significant individuals who have influenced the world of science (eg Carl Linneaus, David Attenborough, Mary Anning and Charles Darwin)

Reading also links to our Science curriculum and the pupils have access to a range of high quality texts (fiction and non-fiction) about scientific events and influential people. Here are some examples:

| | | |
|------|--------------------------|--|
| EYFS | Plants | The Tiny Seed by Eric Carle |
| Y1 | Seasonal Change | Out and About by Shirley Hughes |
| Y2 | Materials | Ocean meets Sky by Eric Fan |
| Y3 | Rocks | The Pebble in my Pocket by Meredith Hooper |
| Y4 | Animals including Humans | The Little Mole who knew it was none of his business by Werner Holzworth |
| Y5 | Space | Curiosity: The story of a Mars Rover by Markus Motum |
| Y6 | Evolution | The Mollie Bird by Jules Pottle |

There are close links between writing and our Science curriculum so pupils can use and apply their scientific knowledge, understanding and skills across a range of genres. Planned writing activities provide opportunities for pupils to show what they know and remember about the science curriculum, events and people who have shaped the world in which we live. Here are some examples:

| | | |
|------|--------------------------|--|
| EYFS | Plants | A story of a tiny seed |
| Y1 | Animals including humans | Non-fiction: an egg spotters guide |
| Y2 | Materials | A captain's log |
| Y3 | Rocks | Letter about an archaeological dig |
| Y4 | Animals including Humans | Narrative writing -The story of a slice of toast |
| Y5 | Earth and Space | Explanation of how their Mars Rover works |
| Y6 | Evolution | Informative description of an endangered animal |