

| INTENT: We aim to...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                       |                                                                                                                                                                                         | Subject on a Page - Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                       |                                                                                                                                                                                                      |
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| Deliver an engaging and exciting curriculum that instils a love of science and meets the requirements of the National Curriculum.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Provide the opportunity for all children to have the knowledge and skills required to be a scientist and to work scientifically in the disciplines of biology, chemistry and physics. | To provide stimulating scientific experiences for children and use our natural environment wherever possible.                                                                           | To develop a caring attitude towards the environment, living things and to encourage appreciation for the world we live in.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | To equip children with the scientific knowledge required to understand the uses and implications of science today and for the future. | Enable children to understand the history of science and the impact of scientists and their scientific discoveries in our world.                                                                     |
| IMPLEMENTATION: How do we achieve our aims?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                       |                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                       |                                                                                                                                                                                                      |
| <b>Planning:</b><br>We follow the Cornerstones Maestro scheme which provides half termly science topics alongside our termly topics. The lessons are created to ensure there is progression of knowledge and skills across the school. Within each year group, scientific knowledge and conceptual understanding is planned in a sequence to ensure children can progress to the next stage with a secure understanding.                                                                                                                                                                                |                                                                                                                                                                                       |                                                                                                                                                                                         | <b>Recording:</b><br>Children in EYFS record their science work on the online platform Tapestry. This evidence may be in the form of work, photographs of activities or comments the children make. In KS1 and KS2, children have a science book and work can be recorded in writing, diagrams, and photographs. Work is also recorded on videos where needed. We ensure that time is given to writing a conclusion following an investigation. These conclusions demonstrate the depth of the children's knowledge and understanding.                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                       |                                                                                                                                                                                                      |
| <b>Assessment:</b><br>The impact of our science curriculum is assessed consistently across the year, with both a formative and summative approach. A continual assessment of science allows for the best possible support and challenge for all children and ensures there is accurate and comprehensive understanding of the quality of education in science. Additional assessment tools include Prior Learning quizzes, End of Unit quizzes, verbal feedback, pupil voice and marking of books.                                                                                                      |                                                                                                                                                                                       |                                                                                                                                                                                         | <b>Vocabulary:</b><br>The Science curriculum has been created to ensure that high standards of teaching and learning are taking place across the school. Science is taught once a week, this allows adequate time for the children's knowledge to be secure and retained into their long-term memory. This helps children build up an extended specialist vocabulary and will support them to articulate their scientific thinking clearly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                       |                                                                                                                                                                                                      |
| <b>Progression in Knowledge and Skills:</b><br>At Donington on Bain Primary School, a knowledge and skills progression document within Cornerstones, which is used for planning, to ensure sequenced and appropriate content for specific year groups. Teachers are clear on the learning and expectations for each year group, as this has been carefully selected and mapped out by Cornerstones so that children are building on prior knowledge and skills each term and each year. Within these documents there are opportunities for differentiation, in order to meet the needs of all learners. |                                                                                                                                                                                       |                                                                                                                                                                                         | <b>Values:</b><br><b>Respectful:</b> We demonstrate respect for others' ideas and viewpoints; for the equipment and materials we use in lessons and especially for the living things we encounter throughout our work.<br><b>Aspirational:</b> We expect all pupils can and will achieve in science and that some may pursue future learning and a career in this area.<br><b>Caring:</b> We show concern for the environment and recognise how we care for each other by using scientific advancement to benefit all.<br><b>Integrity:</b> We follow rules and conventions when conducting investigations and presenting findings accurately.<br><b>Creative:</b> We explore new ways of thinking, ask questions and problem solve.<br><b>Community minded:</b> We learn about the important role Science plays in the advancement of our society, such as medical treatments, DNA testing or the impact of our actions on the environment. |                                                                                                                                       |                                                                                                                                                                                                      |
| <b>SEND:</b><br>Our children with SEND access the science curriculum through careful teacher assessment. Lessons are carefully planned and resourced to enable all children to access their learning at an appropriate level, helping them to engage and be challenged. Children are supported in a variety of ways e.g., support from Teaching Assistant, or peers, differentiated activities.                                                                                                                                                                                                         |                                                                                                                                                                                       |                                                                                                                                                                                         | <b>EYFS:</b><br>Science is covered in the 'Understanding the World' area of the EYFS Curriculum. The children are expected to develop a specific set of skills and knowledge appropriate to their age. This is often beyond the expectations that are set out in the end of year Early Learning Goals, as we prepare our children with the knowledge and skills they will need in science, ready for year 1. As well as topic work and the discrete teaching of skills and knowledge, children in EYFS are given the opportunity to explore, investigate, question and continually practise and embed their language and leaning through the areas of provision set up in the indoor and outdoor learning environments.                                                                                                                                                                                                                      |                                                                                                                                       |                                                                                                                                                                                                      |
| IMPACT: How do we know we have achieved our aims?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                       |                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                       |                                                                                                                                                                                                      |
| Outcomes at the end of each Key Stage are in line with or above National statistics and progress in science is evident                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them.                                             | Children develop a range of scientific skills and the essential scientific enquiry skills to deepen their scientific knowledge and prepare them for life beyond the primary curriculum. | Children enjoy science lessons and are confident to demonstrate and discuss their learning with others.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Children can suggest ways to investigate a hypothesis, ensuring the test is fair.                                                     | Children are beginning to be aware of the possibilities for careers in science. They have an understanding that science has changed our lives and that it is vital to the world's future prosperity. |