Science

Intent, Implementation and Impact Statement

Vision - In science we aim to develop children into curious and independent thinkers.

Intent (What we want to achieve)

Through identification of barriers to learning, teachers at Devonshire ensure a nurturing environment where all children are developed and challenged to be confident in the areas of working scientifically: pattern seeking, observing over time, identifying and classifying, fair testing and research.

- At Devonshire the Science curriculum plan has been made in line with the national curriculum skills which sequences content and ensures a progression model which develops and builds on previous knowledge and skills and expands on pupils' scientific vocabulary.
- The Science curriculum at Devonshire ensures full coverage of the National Curriculum, covering Working Scientifically, Biology, Chemistry and Physics and develops understanding of scientific enquiry.
- The expectation on pupils is to develop a respect for the materials and equipment they handle with regard to their own, and other children's safety; to be curious about the world around them, to have the confidence to explore beyond their boundaries and to question and explore science in action in the world around them.
- The curriculum is monitored by the Science lead/team through a range of learning walks, book scrutinies and observations. Assessment is centrally tracked through half termly staff input using STAT (national curriculum skills).
- The Science curriculum always offers opportunities for interleaving and revisiting which results in deeper knowledge acquisition.
- In addition, Science is woven across the curriculum including modelled texts chosen in English with considerable Science content; the exploration of healthy eating in DT and how a person's body develops in PE.

Implementation (How we will do this)

Through high-quality science teaching, we aim to help our pupils understand how major scientific ideas have played a vital role in society. Moreover, we aim to prepare our pupils for life in an increasingly scientific and technological world.

We aim to do this by:

- Delivering high quality, interesting and engaging science lessons.
- Using scientific contexts to develop and consolidate cross curricular skills.
- Teaching science in a global and historical context; including the contributions of significant scientists from a range of cultures.
- Developing and extending children's scientific knowledge and understanding.
- Developing children's ability to work scientifically and involve them in planning, carrying out and evaluating investigations.
- Developing children's scientific vocabulary and ability to articulate scientific concepts clearly and precisely.
- Ensuring that all pupils are appropriately challenged to make good progress in science.

At Devonshire, teachers plan and deliver high-quality and engaging science lessons incorporating a range of teaching and learning styles. At Devonshire teachers will provide opportunities for children to:

- Learn about science, where possible, through first-hand practical experiences.
- Develop their research skills through the appropriate use of secondary sources.
- Work collaboratively in pairs, groups and/or individually.
- Plan and carry out investigations with an increasing systematic approach as they progress through the school.
- Develop their questioning, predicting, observing, measuring and interpreting skills;
- Record their work in a variety of ways e.g. writing, diagrams, graphs, tables;
- Read and spell scientific vocabulary appropriate for their age.
- Be motivated and inspired by engaging and interactive science displays which include key vocabulary, relevant questions and examples of children's work.
- Learn about science using the outdoor learning environment.
- Parents are informed about and become involved in their child's learning through any homework tasks set.
-

Impact (What the outcomes will be)

At Devonshire Primary School, the science curriculum will ensure that all children will:

- Be curious about the world around them and ask inquisitive questions.
- Have a wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigation skills.
- Have a richer vocabulary which will enable them to articulate their understanding of taught concepts.
- Have an understanding of how aspects of the world around them work.
- See themselves as scientists.
- Be confident and have a love of learning for all things science.