



Newton Primary School
Science Policy
Approved: 19th January 2022
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Intent

At Newton Primary School, we encourage children to be inquisitive and see science as the world around them, whilst acquiring specific skills and knowledge to help them think and reason scientifically. We want them to gain an understanding of scientific processes and have a rich range of scientific vocabulary which they can use progressively as they advance through school.

Implementation

At Newton Primary School, we use the Developing Experts scheme to plan lessons and ensure all children learn and retain knowledge throughout the programmes of study. In each lesson, pupils are given key facts and knowledge through a storytelling approach to learning. Further to this, each lesson offers Rocket Words, these are key words and meanings to learn; vocabulary which is then repeated throughout the lesson, quizzed on at the end and repeated at the beginning of the following lesson.

All our lessons contain a balance of the different 'Working Scientifically Skills' and 'Scientific Enquiry' types, so that children practice a broad range of skills throughout the curriculum. As well as each child having an individual science book and knowledge organiser, each classroom has a science floor book which records whole class and individual scientific thoughts, ideas and responses. These floor books can be recorded in and shared throughout the school week, promoting that notion of science being all around us and not just during science lessons. Wherever possible and suitable the children are taken outside for a first-hand experience of their learning

About Developing Experts

Developing Experts is an online platform used at Newton Primary School to enable the teachers to plan and deliver lessons that are pitched so that children with different starting points can access them. Children need to have a large amount of subject knowledge stored in their long-term memory in order to become competent at any subject, and this is especially true of science. For this reason, these lessons are designed to teach science in a clear and deliberate fashion, emphasising secure content knowledge before moving on to tasks. To build aspiration, a lesson expert often from industry or university enables everyone to learn and deepen their understanding about how the subject relates to the world of work.

Each unit comes with:

- Knowledge Organiser
- End of unit written test

Each lesson comes with:

- Formative quiz
- Word search designed to check each child's ability to spell key words
- Summative quiz
- Careers film
- The training pathway the individual who features in the career film took
- A link to their employer
- Handout
- An expert film
- A mission assignment film
- And sometimes a song

Year group curriculum maps can be found on the science page of the school website, detailing the summative questions linked to each lesson, the resources needed, the key words covered, the National Curriculum links made and the links to the statutory requirements for working scientifically made for each unit. Generic statements have been used for simplicity:

- Asking questions
- Performing tests
- Observing and measuring
- Gathering and recording data
- Identifying and classifying
- Using equipment
- Planning and setting up different types of enquiries