

Our Science Curriculum

Intent

At Dimple Well Infant School and Nursery it is our **intent** that pupils will develop a fascination and love of science. We strive for children to be engaged, inspired and challenged by the world around them and have the motivation to explore and find out about different phenomena. Science lessons help build on the knowledge of the world that the children already have and further develop this understanding, so everyone reaches their full potential. The skills of 'working scientifically' underpin our science teaching and learning and we intend that the children understand and use **scientific vocabulary** appropriate for their stage of learning. The children **ask and answer questions** about what they notice and treat the living and non-living environment with respect and sensitivity. They make careful observations and experiment in a practical way so they develop curiosity and an ability to be effective problem solvers, helping to equip them for challenges now and in the future.

Implementation

The teaching and **implementation** of science is based on the programmes of study set out in the 'Understanding the world' section of the Early Years Foundation Stage Curriculum and the 'Science' section in the Key Stage 1 National Curriculum. The **subject knowledge** in these frameworks is delivered through the chosen topics by each year group and the '**working scientifically**' skills are taught by linking them to this subject content. More details can be found on the Dimple Well yearly and long term plans.

As a school we ensure **scientific vocabulary** is incorporated into science lessons and teachers know what vocabulary is relevant and necessary for their teaching topics. Similarly, **questions** to support the different areas of the science curriculum are presented to the children during all science lessons. These questions are based on 'What', 'Why', 'How' and 'When' and show progression throughout school by incorporating more in depth content and vocabulary. In addition, the children are regularly given access to objects or quick experiments that ignite their natural curiosity and encourage the use of questions and scientific vocabulary. All classes are encouraged to go out into the school grounds to observe the natural world and talk about what they notice around them. Nature detective rucksacks, containing science equipment, are available to support the children with this explorative work.

Dimple Well Infant School and Nursery recognises the importance of **extra-curricular** opportunities to further develop children's science knowledge and skills and therefore we offer a science club every other half term. Science resources are stored in the resource room and available in labelled trays.

Impact

We measure the **impact** of science at Dimple Well by talking with the children and listening to their conversations with each other about the subject. A selection of mixed ability pupils from each class are targeted every half term. They are questioned about their current science learning and about their attitudes towards the subject. Work sampling and lesson observations are conducted every term. Photographs of scientific displays in the classrooms and corridors are taken half termly. Assessments throughout Key Stage 1 are ongoing and recorded on the assessment grid. This helps identify the children who are working towards the expected level, at the expected level and exceeding the expected level in science. Teachers also use assessment information from individual lessons to inform future lessons, ensuring children are supported and challenged appropriately, highlighting strengths and achievements as well as any improvements, knowledge and skills that still need to be embedded.

