



Science Curriculum Statement



Intent

Our Science Curriculum incorporates the skills and knowledge outlined in the National Curriculum. It has been designed to develop, in our children, a sense of excitement and curiosity about natural phenomena and to show them how science can be used to explain what is occurring, predict how things will behave and analyse causes.

Our curriculum will ensure that the children are taught the essential aspects of the knowledge, methods, processes and uses of science through topics and themes covering the disciplines of biology, chemistry and physics. Effective teaching will ensure that our children are able to ask/generate scientific questions about the world around them and that the children are taught the investigative skills needed to find the answers.

We believe that it is vital to widen and build the children's scientific vocabulary/technical terminology, alongside their skills and knowledge, in order to provide them with a common language to discuss their work/findings.

Implementation

Science is taught through a topic based/creative curriculum. Some topics are focused around a scientific theme whilst, in others, science takes a secondary role. The curriculum is sequenced so that skills and knowledge can be built upon and transferred to other areas of learning.

In Key Stage 1 the main focus of our science teaching is to enable the children to experience and observe natural phenomena – looking more closely at the natural and humanly-constructed world around them. They will be taught how to ask questions and will be helped to carry out investigations/experiments in order to answer them. Their 'working scientifically' skills will be developed through the topics covered and not solely in isolation. Although most of the children's learning will be through first-hand practical experiences, the children will be given the opportunity to use secondary sources of information to help with their explorations. The children will have the opportunity to learn about plants; the different animal groups and their habitats; their own bodies and their basic needs; seasonal changes and everyday materials.

In Key Stage 2 the children will have the opportunity to broaden their scientific view of the world around them through exploring, talking about, testing and developing ideas about everyday phenomena and exploring the relationships between living things and familiar environments. They will ask questions and make decisions about how best to answer them. The children will look for patterns, make predictions, carry out fair tests, observe changes over time and draw conclusions. Their scientific language will continue to be developed so that they are able to talk and write about their findings/discoveries. The children's 'working scientifically' skills will continue to be developed throughout the different topics covered. The children will have the opportunity to learn more about plants, animals including humans, everyday materials and their properties, light, forces and magnets, living things and their habitats, states of matter, sound, electricity, changes in materials, Earth and Space and evolution and inheritance.

Pre and post topic assessments are completed in order to show progress and to highlight any knowledge gaps and a 'fast five' activity is used to start off every topic lesson in order to re-inforce and consolidate knowledge from the previous lesson. Teachers refer back to previous learning and share with the children how their learning will be developed and built upon in the next lesson/class so that facts and knowledge can be connected, rather than being taught in isolation. Science trackers are completed at the end of each topic in order to record which children are working below, at or above expected levels and interventions are delivered when needed.

Work is differentiated to enable children of all abilities and backgrounds to access the Science curriculum.

Impact

Our children will show a genuine interest in the world around them and will demonstrate a sound knowledge of the topics covered. The children will be able to generate their own questions and will possess sound 'working scientifically' skills during all investigative and explorative work. The children will have an appropriate scientific vocabulary that they will use accurately and appropriately to talk about their work. Our children will be able to select appropriate equipment fit for task and will work safely with a range of apparatus. Our children will possess the relevant skills and knowledge needed for the next stage of their Scientific education.

