



Marsh Green Primary School



Science Policy

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A high-quality science education provides foundations for understanding the world. Science has changed our lives and is vital to the world's future prosperity. Through building key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how things will behave, and analyse causes. This understanding should be consolidated through their appreciations of science in society and the economy.



Aims

Our Science Curriculum is designed to provide a wide range of enhancement opportunities and experiences to ignite children's curiosity and broaden their horizons. They will become effective communicators by being immersed in a language-rich environment that includes scientific vocabulary. Removing any barriers to learning, enables our pupils to make progress, within a secure and caring environment. We want children to be engaged in their own learning, have the opportunity to experiment and understand that they can overcome challenges. Every child will be given the opportunity to achieve their own academic potential, and enjoy learning across a wide range of science disciplines. We hope that by developing our children's skills, knowledge and attitudes they will be empowered to lead rich and fulfilling lives, with a natural curiosity of the world round them.

Organisation

To enrich our science curriculum, we provide many investigative learning experiences that are relevant to real-life, within an environment that promotes scientific enquiry and the correct use of technical vocabulary. Outcomes are designed to not only meet the needs of the National Curriculum, but also to

Achieve Believe Celebrate

develop life-long learning, empathy and co-operation skills. A cross-curricular approach to many topic areas ensures coverage of the whole curriculum, which is carefully planned to ensure progression; through knowledge, skills and concepts and helps to develop a deeper understanding. Early Years use their holistic curriculum to cover the necessary objectives which in turn develops across KS1 and 2 into a series of progressive and cumulative lessons, helping children to retain subject content and skills. Throughout a unit of work and at the end, children's learning is assessed to address misconceptions and to inform future learning. To ensure equity, we tailor the curriculum according to individual needs in order to remove barriers. Children are encouraged to show perseverance and resilience, having the growth mind-set to learn through their mistakes and achieve to be the best that they can be.

Planning

The programmes of study for science are set out year-by-year for Key Stages 1 and 2 in the science subject overview booklet. The school follows the agreed planning map laid out in this Science Curriculum Document. Teachers base their short term planning on the programmes of study for their relevant year groups and use the Grammarsaurus scheme of work to assist for planning individual units. These are adapted in order to make our science curriculum ambitious and aspirational and to provide the most effective adaptive teaching for the current year group and to include relevant opportunities for retrieval. Science matrices are also available to support year group planning in order to ensure progression and develop teacher's subject knowledge.

Foundation Stage pupils investigate science as part of Understanding of the World. Children are encouraged to investigate through practical experience; teachers guide the children and plan opportunities that allow the children to experience and learn whilst experimenting for themselves.

Pupils in Key Stage 1 will be introduced to science through focused observations and explorations of the world around them. These will be further developed through supportive investigations into more independent work at Key Stage 2. The knowledge and content prescribed in the National Curriculum will be introduced throughout both key stages in a progressive and coherent way.

Assessment and Recording

Teachers will assess whether children are working at/above or below the expected level for their age based on their understanding and application of the content of the National Curriculum 2014. In Years 1-6 this assessment uses the Grammarsaurus assessment materials and is completed at the end of each unit. Results are recorded on an assessment tracker that follows the same format as other core subjects. Children in Year 6 use SATs style questions, with more observational assessment taking place in Year 1 and Foundation Stage. Progress and attainment is reported to parents through parents' evenings and end of year reports, with end of Key-stage data being reported and compared with National results.

Resources

The Science store cupboard includes all equipment needed for each unit and staff access when required. It is re-stocked when needed. This includes specialist pieces of equipment and any posing a potential safety risk are suitably stored. A variety of shared planning tools and resources are stored on the school Shared Drive and are available for all staff.

Monitoring and Review

Science leads will ensure there will be a science focus for staff meetings when needed. Standards of teaching and learning will be assessed using books, pupil voice, lesson drop-ins and data review.

This policy reflects the requirements of the National Curriculum programmes of study to provide a broad and balanced curriculum. It also reflects requirements for inclusion and equality as set out in the Special Educational Needs and Disability Code of Practice 2014 and Equality Act 2010. In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the Early Years Foundation Stage (EYFS) statutory framework.

The governing board will monitor the effectiveness of this policy and the headteacher will ensure that all required elements of the curriculum, have aims and objectives which reflect the aims of the school and indicate how the needs of individual pupils will be met. Provision is in place for pupils with different abilities and needs, including children with SEN. It is the responsibility of teaching staff to ensure that the school curriculum is implemented in accordance with this policy.

This policy also links to the following policies and procedures: