

Grand Avenue Primary and Nursery School

A Policy for Science

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Aims

To ensure that

- The Science curriculum is effectively implemented allowing children to develop a sense of excitement and curiosity about the world around them
- Staff are confident with the expectations of the New Science curriculum
- Children develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics
- Standards are raised in Numeracy and Literacy through cross curricular opportunities
- Children develop an enquiring mind, practical skills and logical thought.
- Children develop a strong focus on working scientifically to understand the nature and methods of science to prove a hypothesis.
- Children to develop an understanding of the nature, processes and methods of science through different types of science enquiries, that help to answer scientific questions about the world
- Children to be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future
- Children encouraged to question scientific understanding and the theories of others
- Children develop a respect for the environment and a caring attitude towards the animal and plant life within it.
- Children are encouraged to give consideration to their own personal health and safety and the health and safety of others
- Children increase their scientific vocabulary and develop communication skills through oral work, practical activities and recording
- Opportunities are provided to enhance science learning through the use of IT
- Strong cross-curricular links are created to allow scientific knowledge to be developed in other areas of study
- Indoor and outdoor environments are used for the learning of science that is welcoming, stimulating, accessible, safe, secure and challenging.

The Role of the Co-ordinator

- Ensuring staff are confident in the teaching all elements of science curriculum
- Ensuring staff are aware of all safety guidelines (See 'Be Safe' and CLEAPSS)
- Organise, select and store Science resources
- Co-ordinate assessment procedures ; including moderation
- Advise and evaluate the needs of the staff; assisting colleagues in devising programmes of study and medium term plans
- Ensuring the skills ladder is reviewed regularly to ensure progression and coverage
- Liaise with outside advisory teams and agencies
- Ensure staff are aware of new initiatives or ways of working
- Reporting on Science to the Headteacher, staff, parents and Governors
- Attending relevant INSET and CPD opportunities

The Role of the Governors

- Becoming familiar with content and issues surrounding this policy
- Agreeing the policy, revisions and amendments
- Evaluating the success of the policy through visits to school
- Regularly reviewing the policy alongside the Science co-ordinator
- Supporting the implementation of the policy
- Ensuring funding to support this policy is considered in the budget setting process
- Having a clear view of strengths and areas for development
- Attending relevant training
- Ensuring that this policy is fundamental to decision making

Planning, Monitoring and Evaluation

The science coordinator will monitor medium-term and short term plans to ensure continuity and progression within and between year groups.

The science coordinator will also undertake lesson observations, moderation, book looks, learning walks, in-line with the school's program of monitoring.

APP will also be monitored across the school. Pupil books and teacher marking will be scrutinised to ensure progression, progress and high standards throughout the school

Assessment

Assessment for learning takes place during each lesson to inform future planning. Teachers will evaluate and annotate their plans as they are taught (to improve effectiveness) and then modify and update as appropriate.

At the end of each unit, the class teacher assesses the work undertaken by each child against the skills ladder. Children are also given opportunities to review and assess their learning (See marking and feedback policy)

Health and Safety

Many aspects of primary science involve little or no danger beyond the normal hazards of the classroom. However, safe working practice is to be encouraged, and pupils will be taught simple safety precautions. It is the responsibility of the class teacher to carry out risk assessment prior to activities. Teachers will consult the Science co-ordinator or refer to the 'Be Safe' booklet for further advice.

The following precautions should be observed :

- The need for eye protection and the fastening back of hair, where appropriate
- An understanding of the hazards of tasting or putting things into the mouth
- Correct animal care and handling techniques
- The hazards of heating and burning, in relation to candles, kettles, electricity
- Potentially dangerous plants due to stinging or allergic reactions
- When studying outdoors consideration should be given to the following areas ; ponds, gardening tools, washing hands, farm visits and field work
- Correct food hygiene precautions

(See Health & Safety Policy and Teacher's Handbook)

Equal Opportunities

Grand Avenue will ensure that every child (regardless of physical, sensory, intellectual, emotional or behavioural difficulties, gender, social and cultural background, religion or ethnic origin) has access to a range of science based experiences, which :

- Are developmentally appropriate
- Make sense of their world through exploration and structured and purposeful activities
- Cover relevant areas of science learning
- Aim towards common high standards for all

The children are given appropriate work to ensure differentiation and progression.

More able pupils are challenged by the class teacher through extension activities.

Children with SEN will be supported by their class teacher through a range of strategies.

Cross Curricular Opportunities

As well as being a core area of the National Curriculum, Science contributes to the wider aims of Primary Education and makes a significant contribution to the following cross curricular areas

PSHE

Numeracy

Literacy

Appendix

Standards in Literacy

Curriculum targets for Literacy apply to all subject areas.

To ensure high standards in all written work and promote the aims of the school in all subject areas by -

- highlighting the importance of higher order writing skills
- providing opportunities to develop speaking and listening skills
- ensuring the correct use of grammar is a high priority in all written work
- developing positive cross curricular links between Literacy and other subject areas