

VICTORIA PRIMARY SCHOOL
SCIENCE POLICY

This policy outlines the teaching and management of Science taught and learnt at Victoria Primary School. The policy has been drawn up to reflect our whole school approach to Science and has been discussed with staff and has the agreement of the Governing Body. The implementation of this policy is the responsibility of all practitioners in the school learning community supported in partnership with parents.

AIMS

The school's aims in Science are to:

- Develop the scientific skills of questioning, making suggestions and predicting, fair testing, observing, using equipment and measuring, recording and communicating findings, drawing conclusions and identifying patterns and trends. This will lead to children learning to work as scientists; planning and undertaking scientific investigations and considering evidence derived from them.
- Develop knowledge and understanding of important scientific ideas, processes and skills and relate these to everyday experiences.
- Be curious about the things children observe experience and explore relating to the world around them.
- Provide opportunities where children can apply key skills to enhance their understanding of Science concepts.
- Use appropriate scientific and mathematical vocabulary to communicate ideas.
- Develop a respect for the environment and living things and an understanding of how human activity impacts these things.
- Develop children's skills of investigation and to enhance their knowledge of how the world is constructed from their earliest experiential play within the Foundation Phase to more sophisticated whole investigations by the end of Key Stage 2.
- Develop the attitudes of critical reflection, enjoyment, curiosity, perseverance, co-operation, turn taking, creativity, inventiveness, respect for evidence, open mindedness and willingness to tolerate uncertainty.

Other policies refer to Science related issues and should be read in conjunction with this policy Statement:

- Geography Policy
- PSE Policy
- Sex Education
- ESDGC Policy

PROVISION

- Curriculum maps have been updated to reflect changes as published in the Foundation Phase framework and Curriculum 2008 ensuring compliance with statutory orders.
- Schemes of work are being updated through collation of medium / short term planning that highlight changes in pedagogy and links between different subjects that complement key skills consolidation.
- Nursery have always implemented an experiential approach to learning, this is now being further developed in reception and is developing in years 1 & 2 as we prepare for full Foundation Phase implementation by 2010.

- Key Stage 2 teachers have been planning for more enquiry based learning with pupils taking greater responsibility for their learning and thus developing more independent lifelong learning skills. Key skills development has been prioritised in the revised planning.
- These approaches will continue to be developed to improve children's key skills and subject specific skills before moving to thematic schemes of work across the whole school.
- Throughout the Foundation Phase and Key Stage 1 Science will be taught as an integral part of a theme linked with other curriculum areas where possible. Children in Key Stage 1 will follow the programmes of study in National Curriculum 2000 until the foundation phase areas of learning have been 'rolled out' in all infant year groups. However, teacher's planning and delivery of lessons reflect the foundation phase ethos where pupils are encouraged to learn experientially. In the foundation phase the pupils learning in science is planned using the Framework for Children's Learning document.
- In Key Stage 2 science is taught as a discrete subject following a half termly topic. Links to other areas of the curriculum are made where appropriate.
- Children from years 3 to 5 follow the programmes of study set out in the new subject orders while those in year 6 are taught from the old programmes of study (National Curriculum 2000). From September 2009 all children in Key Stage 2 will follow the same programmes of study outlined in the new subject orders.
- Although no formal regular homework is given in this subject area, teachers will encourage children to find out information and practice scientific skills out of school time in a variety of ways to extend teaching and learning. In addition, teachers will provide opportunities to share and value the children's efforts outside school, within future lessons and during extra curriculum clubs.

ASSESSMENT, RECORDING AND REPORTING

- Assessment in Science is ongoing and formative with a variety of strategies used such as observation, discussion, marking and questioning. Assessment for learning which is becoming embedded in the school encourages children to be more involved in their learning in Science. (See ARR policy for more information)
- Whilst the most significant source of evidence for children's achievement will come from the on going evaluation of lessons, from time to time teachers may feel they need to consolidate these views. Optional Assessment Materials are examples of more formal assessments that may be used for this purpose.(Applicable for Science, Maths and English)
- Information from assessment is used to inform the teacher's short term planning and to help the teacher identify ways forward for the pupils learning.
- Pupils progress in Science is recorded using field notes and teachers marking. A Science portfolio contains examples of pupils' work from different year groups which demonstrate different standards of levels of attainment.

MONITORING AND EVALUATION

The curriculum leader and senior management team are responsible for the monitoring standards annually and a full Science review is implemented in line with the school's curriculum review cycle. The curriculum leader prepares an annual self-evaluation report that feeds into the whole school improvement plan.

EQUAL OPPORTUNITIES

- We are committed to providing a teaching environment conducive to learning. Each child is valued respected and challenged regardless of ability, race, gender, religion, social background, culture or disability.
- More able children will be challenged and motivated by differentiated work given by the teacher appropriate to his or her needs. Teachers will also use questions that allow the more able child to maintain their involvement in the lesson and demonstrate their knowledge and abilities.
- Most Science lessons are appropriate for all children since the teacher will differentiate as necessary for those children with specific needs. Liaison with the special needs coordinator will sometimes be necessary. However, a pupil whose difficulties are severe or complex may need to be supported by a special needs assistant in addition to appropriately differentiated tasks given by the teacher.

RESOURCES

- Science resources are stored centrally in topic boxes in the subject leader's classroom with attached lists of equipment contained. Additional resources are stored in the science cupboard.
- Resources are audited on a regular basis by the subject leader and monies allocated to the purchase of new resources to ensure that the curriculum can be delivered in an exciting and stimulating manner.

LINKS WITH THE LOCAL AND WIDER COMMUNITY

Every opportunity is given to raising children's awareness of the rich human and physical resources that are available to them both locally and nationally.

- A number of agencies and external bodies are used to provide children with richer and more varied learning opportunities. Careers Wales, U.W.I.C., Cog Moors, Techniquet, and Dow Corning are some examples of providers who enhance children's learning in a variety of settings.
- Links with the feeder secondary school are exploited to ensure a smooth transition from year 6 to year 7.
- Education for Sustainable Development and Global Citizenship (ESDGC) is an integral part of the Science curriculum .ESDGC allows the children to make links with the environment, the world and ways that living things relate to each other. Recognising there are connections with everyday life and the wider world, through investigations, visits and visitors.
- Science contributes to Curriculum Cymrieg by the use of contexts that are relevant to learners' lives in Wales and the impact of humans within their locality and further a field.

This policy will be reviewed annually by the staff and the governing body curriculum committee.

Signature of headteacher: Date:

Signature of chairman of governors: Date:

**OUR LEARNING GOAL IS TO IGNITE OUR CURIOSITY,
MOTIVATE, CHALLENGE AND INSPIRE US SO THAT TOGETHER
WE AIM FOR THE STARS.**