

VICTORIA PRIMARY SCHOOL MATHEMATICS POLICY

This policy outlines the teaching and management of Mathematics taught and learnt at Victoria Primary School. The policy has been drawn up to reflect our whole school approach to Mathematics 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.

AIMS

The school's aims in Mathematics are to:

- Develop the mathematical skills of problem solving, selecting appropriate mathematical skills and equipment, developing strategies, communicating and interpreting information clearly in a range of ways, explaining strategies, reasoning mathematically, checking results and identifying patterns and trends. This will lead to children learning to work as mathematicians; developing the application and understanding of their skills using a wide range of contexts and mathematical techniques.
- Develop knowledge and understanding of important mathematical processes and skills and relate these to everyday experiences in order to equip pupils for daily life.
- Develop curiosity about the things children observe, experience and explore relating to mathematics in the world around them.
- Use Mathematics to develop the principles of ESDGC, referring to local, national and international concerns, and using Mathematical skills such as gathering information and understanding and presenting findings to enrich children's grasp of the issues involved.
- Provide opportunities where children can apply key skills to enhance their understanding of mathematical concepts.
- Use appropriate mathematical vocabulary to communicate ideas.
- Develop children's skills of investigation and to enhance their knowledge of how mathematics involves rules and patterns 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, learning from mistakes, open mindedness and willingness to tolerate uncertainty.
- To develop the understanding and use of number and number notation, measures, money, the properties of shapes, position, movement and probability at the appropriate level, building on understanding from year to year.
- To enable children to calculate in different ways, investigate patterns and relationships and collect, represent and interpret data.

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 two 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 Mathematics will be taught discretely and 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 mathematics is planned using the Framework for Children's Learning document.
- In Key Stage 2 mathematics is taught as a discrete subject following the themes in the Abacus Evolve scheme, linking investigate work number and other areas of Mathematics together. 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.
- Regular homework is given in this subject area, mainly in the form of games and practical activities which can be done with adults or siblings in order to practise mathematical skills out of school time to extend teaching and learning. In addition, teachers will provide opportunities to share and value the children's efforts outside school, within future lessons.
- Weekly topical maths challenges are set for Key Stage 2 children, who are encouraged to work on these at home.
- Children in Key Stage 2 are grouped according to ability in Mathematics, based on examination of the data provided by the County and teachers' own professional opinion of their abilities. Extension and support groups are in place throughout Key Stage 2. Targeted under-attainers are supported by an individual programme: Catch Up Numeracy. All these groups are flexible in their make-up and are regularly reviewed.

- The school as a whole is using the Ginn Abacus Evolve maths scheme as a basis for planning. The scheme is interactive and uses IT as an integral part of it, including the Talk Maths and Solve the Problem CDs. There is also software where the children can individually practise skills at their own level.
- Practical differentiated group activities are planned which also involve problem solving and discussion. These can be independent or supported by an LSA or class teacher.
- The weekly planning for Abacus Evolve is used as a base for teachers, who then adapt and augment depending on progress, needs of the children and timetabling restraints, as well as topical issues. Further adaptations are made by the addition of teachers' own activities, and the use of a variety of resources in the school, including maths games and suggestions for problem solving.

ASSESSMENT, RECORDING AND REPORTING

- Assessment in Mathematics 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 Mathematics. (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.
- 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 Mathematics is recorded using field notes and teachers marking. A Mathematics 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 Mathematics 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 Mathematics 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

- Most regularly used Mathematics resources are stored in boxes in classrooms. Additional resources are stored in the mathematics area of the resource room and in the mathematics cupboard.
- Each classroom has a range of practical games aimed at different curriculum levels.
- 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.
- The principles of ESDGC are adhered to wherever possible when using and ordering resources.

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. Most recently Techniquest provided a range of equipment which was made available to Key Stage 2 to develop practical problem solving techniques.
- Links with the feeder secondary school are exploited to ensure a smooth transition from year 6 to year 7.

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.**

