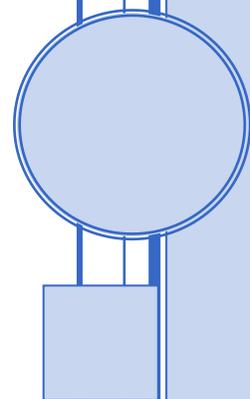




GULLANE PRIMARY SCHOOL

NUMERACY AND MATHEMATICS POLICY

1/1/2019



GULLANE PRIMARY SCHOOL

NUMERACY AND MATHEMATICS POLICY

(This policy takes account of the recommendations set out in a Curriculum for Excellence (CfE). It should be read in conjunction with our Learning and Teaching, Assessment and Support for Learning policies.)

RATIONALE

Children's experience of mathematics should enable them to develop:

- a secure understanding of the concepts and processes of mathematics
- the confidence to apply their skills in different contexts including the world of work
- essential numeracy skills which will allow them to participate fully in society
- an understanding of maths, its impact on our society, past and present and its potential for the future
- an understanding that successful independent living requires financial awareness, effective money management, using schedules and other related skills
- an ability to interpret numerical information and appropriately and use it to draw conclusions, assess risk, and make reasoned evaluations and informed decisions
- the confidence to apply their skills and understanding and creatively and logically to solve problems, within a variety of contexts.

AIMS

Through our approach to the learning and teaching of numeracy and mathematics we aim to:

- develop skills which children require for life, learning and work.
- develop a positive attitude to numeracy and mathematics as an interesting, useful and worthwhile subject.
- develop mental agility and problem solving capabilities.
- provide all pupils with a range of meaningful contexts and activities, which are practical, investigative, enjoyable and challenging.
- develop an ability to think clearly, logically and imaginatively with confidence, independence and flexibility
- work toward raising attainment in the area of numeracy and mathematics.

IMPLEMENTATION

Planning

In Gullane Primary, we plan using the outcomes for Numeracy and Mathematics, along with East Lothian Frameworks, to ensure that balance is achieved within each of the three organisers detailed in CfE:

- | | | |
|--|---|---|
| <input type="checkbox"/> Number, money and measure | <input type="checkbox"/> Shape, position and movement | <input type="checkbox"/> Information handling |
|--|---|---|

The outcomes provide the content, across the range of aspects of numeracy and mathematics, through which children will learn the skills and strategies required to approach problem solving and enquiry activities.

Learning and Teaching

Our numeracy and mathematics curriculum is designed to ensure that from the early stages onwards, our children experience success in mathematics and develop the confidence to take risks, ask questions and explore alternative solutions without fear of being wrong. They should enjoy exploring and applying mathematical concepts to understand and solve problems, explaining their thinking and presenting their solutions to others in a variety of ways. At all stages, an emphasis on collaborative learning will encourage children to reason logically and creatively through discussion of mathematical ideas and concepts. Through use of effective questioning and discussion, teachers will use misconceptions and wrong answers as opportunities to improve and deepen children's understanding of mathematical concepts. East Lothian Numeracy Frameworks provide the basis for our learning and teaching.

To achieve this, teachers will use a skilful mix of approaches, including:

- planned active learning which provides opportunities to observe, explore, investigate, experiment, play, discuss and reflect
- modelling and scaffolding the development of mathematical thinking skills
- learning collaboratively and independently
- opportunities for discussion, communication and explanation of thinking
- developing mental agility
- using relevant contexts and experiences, familiar to young people
- making links across the curriculum to show how mathematical concepts are applied in a wide range of contexts, such as those provided by science and social studies
- using technology in appropriate and effective ways
- building on the principles of Assessment is for Learning, ensuring that young people understand the purpose and relevance of what they are learning
- developing problem-solving capabilities and critical thinking skills.

Activities should:

- be supported by a variety of teaching strategies. Approaches adopted will be an appropriate balance between exposition, interactive, discussion and enquiry methods.
- be balanced between tasks which develop knowledge, skills and understanding and those which develop the ability to tackle practical problems and carry out mathematical investigations.
- be balanced between those which are short in duration and those which have scope for development over an extended time.
- involve independent as well as collaborative work, where appropriate.
- develop pupils in the use of oral, mental and written forms of calculations.
- provide opportunities for pupils to select and use a range of mathematical resources with confidence.
- be set in a variety of contexts where mathematical skills and knowledge can be developed or practised within real-life situations.

Recording and Presenting

- The core programme will provide material for pupils to gain experience in a range of mathematical skills.
- Pupils should be taught, and encouraged, to show “working” wherever possible/desirable.
- Pupils will be offered a variety of ways to record their work (eg using ICT, models, concrete materials, jotters, photographs, video and audio recordings, etc)
- Pupils are expected to achieve a high level of presentation and are to be encouraged to be thorough and well organised.

Cross –curricular links

There are many opportunities to develop mathematical concepts in all other areas of the curriculum. Patterns and symmetry are fundamental to art and music; time, money and measure regularly occur in modern languages, social studies, design technology and various aspects of health and wellbeing; graphs and charts are regularly used in science and social studies; scale and proportion can be developed within social studies; formulae are used in areas including health and wellbeing, technologies and sciences; while shape, position and movement can be developed in all areas of the curriculum.

Gullane has adopted an interdisciplinary approach to planning and the implementation and delivery of lessons. Pupils will develop a deeper understanding of numeracy and mathematics by transferring their skills to real life contexts across the curriculum and beyond.

RESPONSIBILITIES

The **Management Team (MT)** will:

- support and advise teachers in implementing this policy
- ensure that this policy is understood and implemented by staff, pupils, parents and others

Teachers will:

- plan in accordance with school policy and guidelines
- record, assess and evaluate individual, group and whole class progress using school, authority and national guidelines
- share and discuss progress with pupils, parents, management and other partner agencies.

Parents’ Role

Working in partnership we aim to:

- encourage parents to use their knowledge and skills for enhancement of learning and teaching
- foster home/school links through homework, the school website, parent consultations, written reports and parental involvement in class.

MONITORING AND EVALUATION

The responsibility for the implementation of this policy lies with all staff; however, promoted staff will, through routine quality assurance procedures seek to ensure that it is put into practice. All staff will be involved in evaluating the effectiveness of this policy.