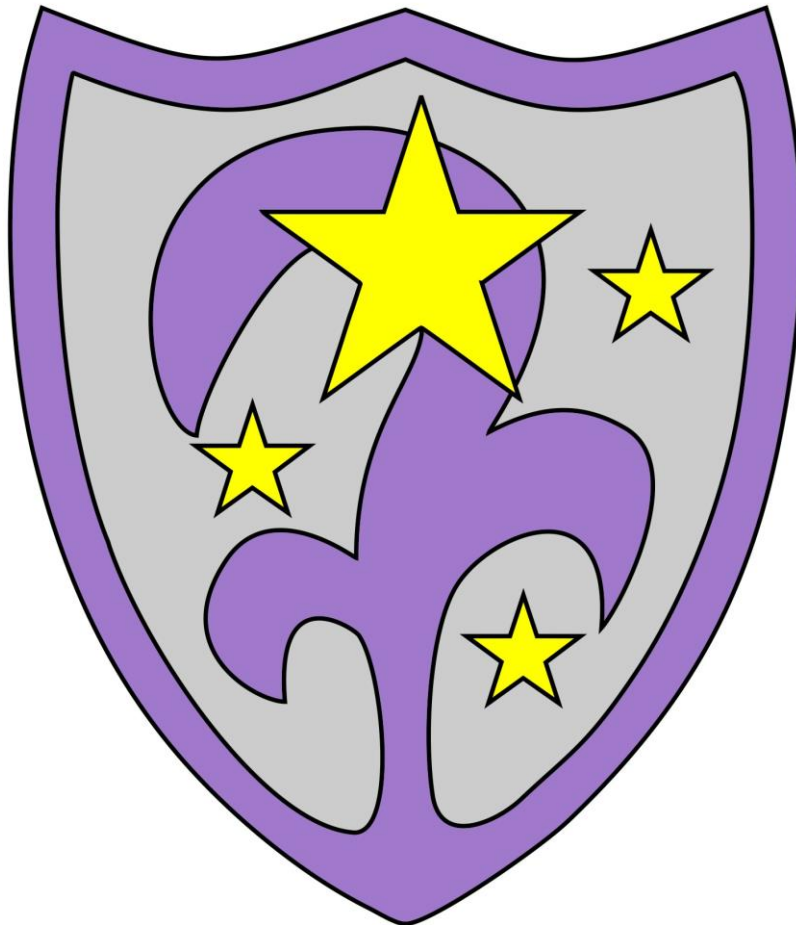


Elliston Academy



Mathematics Policy

Responsibility: Key Skills Team

Date: Autumn 2018

Review: Autumn 2019

Signed:

Principal - C. Patterson

Chair of GB - N. Skinner

Introduction

We aim to provide the pupils with a mathematics curriculum, which will produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident. We also aim to produce a stimulating environment and adequate resources so that pupils can develop their mathematical skills to their full potential.

We aim to give all our pupils equal access to the whole mathematics curriculum, ensure that all children experience success, develop mathematical thinking and reasoning skills and enable each child to work independently and cooperatively when applying their skills in problem solving contexts.

Aims

At Elliston, mathematics is taught in a way that enables children to develop their mathematical skills and use them to solve problems relating to quantity, space, shape and measure in everyday life, thus making sense of the world around them. We have several aims for our children:

- ✓ To develop and deepen understanding through a structured, practical and fun curriculum which fosters and celebrates each child's contribution and achievements
- ✓ To enable them to be fluent in the fundamentals of maths, including through varied and frequent practice with increasingly complex problems, so that they develop conceptual understanding and the ability to recall and apply knowledge confidently and accurately
- ✓ To build on the earliest perceptual and cognitive learning and deepen their understanding through problem solving and reasoning in real life situations.
- ✓ To enable them to use their learning to become as independent as possible in their adult lives.

Teaching and Learning

Pupils are provided with a variety of opportunities to develop and extend their mathematical skills in and across each phase of education.

Our lesson formats are flexible and time to talk and reason is built into every lesson. An opportunity to learn and practise number facts and times tables is provided each day. The teaching of mathematics at Elliston Primary Academy provides opportunities for children to work in a variety of ways:

- Group work
- Paired work
- Individual work
- Whole class teaching

Within mathematics' lessons, through careful planning and preparation, pupils engage in the following:

- The development of mental strategies
- Written methods
- Practical activities and mathematical games.
- Investigational work
- Problem solving
- Mathematical discussion and reasoning
- Consolidation of basic skills and number facts

At Elliston Primary Academy, we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. We use appropriate mathematical terminology in our teaching and children are expected to use it in their verbal and written explanations. Mathematics is used in other curriculum areas wherever possible or appropriate. This helps to expand and consolidate mathematical concepts and using maths in a purposeful way in real contexts helps the children to realise that mathematics is important in the real world. We endeavour to set work that is challenging, motivating and encourages the pupils to talk about what they have been doing.

Equal Opportunities

All children have equal access to the mathematics curriculum regardless of gender or ethnicity. This is monitored by analysing pupil performance throughout the school to ensure that any disparity between the groups is minimised and a plan of action is devised to improve this.

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of multi-cultural aspects of mathematics. In the daily mathematics lesson, we support children with English as an additional language in a variety of ways, e.g. repeating instructions, speaking clearly, emphasising key words, using picture cues, playing mathematical games and encouraging children to join in counting.

Planning

Mathematics is a core subject of the National Curriculum and we use the National Curriculum 2014 as the basis for our implementation of the Programmes of Study for mathematics. Planning is done in three phases – long term, medium term and short term.

Differentiation

This is incorporated into all mathematics lessons to ensure that every child can access the lesson and meets their full potential. It can be through use of practical equipment, adult intervention or questioning to deepen and further understanding.

Resources for the Teaching of Mathematics

There is a range of resources to support the teaching of mathematics across the school. These include a range of books containing suggested teaching activities as well as games, measuring equipment and other practical apparatus. All these items are stored centrally in the maths cupboard.

All classrooms have a range of appropriate small apparatus (e.g. numicon, dienes apparatus, place value counters, number squares, numeral cards, cubes and dice). Within the classroom, resources are readily accessible to children who are encouraged to select materials that are suitable to their task. In the early years this selection of resources will need guidance from the class teacher but as children progress through the school they should become increasingly independent in their selection.

Assessment and Monitoring

Children's work and progress is assessed regularly. Formative assessments following each lesson inform the next lesson and assessments are made each half term against the end of year expectations for each half term. The progress each cohort is making is then reviewed at Cohort Performance Review meetings.

Marking of Mathematics Work

Children's written work is marked on completion of a lesson or a task. For further details on marking of pupils' work in mathematics, please refer to the school's

Marking and Feedback Policy.

Monitoring and review

Mathematics is monitored regularly throughout the school using a range of strategies:

- Book trawls
- Pupil interviews
- Lesson observations
- Review and monitoring of planning
- Analysis of data

Governing Body

At Elliston Primary Academy, members of the governing body are often involved in the monitoring and review process for maths. They are kept informed of any issues that arise, and the key areas that are being focused upon.

This policy will be reviewed in Autumn 2018