

Cartmel CE Primary School

Mathematics Policy

2018/2020

The Governing Body adopted this policy on: June 2018

Approved by: D Milner

Review date: June 2020

Mission Statement

'Mighty Oaks from Little Acorns Grow'

We will do our best, be happy and honest, show respect and be friendly.

At Cartmel we create a happy caring environment based on Christian Values, where we value every child and encourage them to strive for their highest standards of achievement. We ensure that our young people go into the world as confident, independent, responsible citizens with a love for learning.

Our Mission Statement pays homage to our conviction that there is something potentially wonderful in every individual.

Introduction

We aim to provide the pupils with a mathematics curriculum which will produce individuals who are literate, 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 enable each child to work independently and co-operatively.

Aims

At Cartmel CE Primary, mathematics is taught in a way that enables children to make sense of the world around them by understanding relationships, patterns and changes in, quantity, space, shape and measure in everyday life.

We aim to:

- ✓ Develop this understanding through a structured, practical and fun curriculum which fosters and celebrates each child's contribution and achievements.
- ✓ Enable our children 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 rapidly and accurately.
- \checkmark Build on the earliest perceptual and cognitive learning through to problem solving and reasoning in real life situations.
- \checkmark Enable our pupils 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.

The lesson format we follow includes a mental/oral starter, a main teaching activity and a plenary session. The teaching of mathematics at Cartmel CE Primary School provides opportunities for:

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

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

- > The development of mental strategies
- > Written methods
- Practical activities and mathematical games.
- > Investigational work
- > Problem solving
- > Mathematical discussion
- > Consolidation of basic skills and number facts
- > Working with computers as a mathematical tool.

At Cartmel CE Primary School 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 the appropriate mathematical terminology in our teaching and children are also 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. 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 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, 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 should always be incorporated into all mathematics lessons to ensure that every child can access the lesson meets their full potential.

Resources for the Teaching of Mathematics

There is a range of resources to support the teaching of mathematics across the school. These include a wide range of books containing suggested teaching activities as well as games, measuring equipment and other practical apparatus. All classrooms have a number line and a wide range of appropriate small apparatus (e.g. number squares, numeral cards, cubes, dice and dominoes). 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 pupils progress through the school they should become increasingly independent in their selection.

Assessment and Monitoring

Children's work and progress is assessed from three aspects at our school - long term, medium term and short term.

Marking of Mathematics Work

Children's written work is marked on completion of a lesson or a task. Comments on pupils' work should include personal praise for accuracy, effort and achievement of the learning objective. In addition there should be a mathematical 'next steps/challenges' that point towards improved performance. For further details on marking of pupils' work in mathematics please refer to the school Marking Policy.