

Altham St. James CE Primary School

Maths Policy

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Policy for Mathematics

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POLICY FOR MATHEMATICS/NUMERACY

1. INTRODUCTION

Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them.

The Mathematics National Curriculum 2014 describes what must be taught in each key stage. This ensures continuity and progression in the teaching of mathematics. In early years the curriculum is guided by the Early Learning Goals.

2. RATIONALE

All school policies form a corporate, public and accountable statement of intent. As a primary school it is very important to create an agreed whole school approach of which staff, children, parents, governors and other agencies have a clear understanding. This policy is the formal statement of intent for mathematics. It reflects the essential part that mathematics plays in the education of our pupils. It is important that a positive attitude towards mathematics is encouraged amongst all our pupils in order to foster self-confidence and a sense of achievement. The policy also facilitates how we, as a school, meet the legal requirements of recent Education Acts and National Curriculum Requirements.

3. SCOPE

This statement of policy relates to all pupils, staff, parents and governors of Altham St. James CE Primary School. The age range of pupils from 4-11 must be acknowledged in the creation of a policy and the development of the mathematics curriculum.

4. PRINCIPLES

The principles of Altham St. James CE Primary School for mathematics are:

- policy and provision are evaluated and reviewed regularly
- resources of time, people and equipment are planned, budgeted for and detailed when appropriate in the SDP.
- the governing body of Altham St. James CE Primary School discharge their statutory responsibility with regard to mathematics
- cross curricular links will be highlighted where appropriate
- planning of mathematics ensures continuity and progression across all year groups and key stages

5. AIMS

5.1 General

Although relating specifically to mathematics our aims for the subject are also in line with the school's general aims.

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 provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to their full potential.

5.2 Specific

Our pupils should:

- have a sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out numbers mentally
- calculate accurately and efficiently, both mentally and in writing and paper, drawing on a range of calculation strategies
- make sense of number problems, including non routine problems, and recognise the operations needed to solve them
- explain their methods and reasoning using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2D and 3D shapes

6. PROVISION

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

Lessons will usually include a mental/oral starter, a main teaching activity and a plenary session. The teaching of mathematics at Altham St. James CE Primary School provides opportunities for:

- group work
- paired work
- whole class teaching
- individual work

Pupils engage in:

- the development of mental strategies
- written methods
- practical work
- investigational work
- problem solving
- mathematical discussion
- consolidation of basic skills and number facts

At Altham St. James 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 vocabulary section from the Lancashire support planning disc when planning to help determine the appropriate terminology to use in our teaching and children are expected to use it in their verbal and written explanations.

Mathematics contributes to many subjects and it is important the children are given opportunities to apply and use mathematics in real contexts.

'It is important that time is found in other subjects for pupils to develop their Numeracy Skills, eg. there should be regular, carefully planned opportunities for measuring in science and technology, for the consideration of properties of shape and geometric patterns in technology and art, and for the collection and presentation of data in history and geography' (NNS).

We endeavour at all times to set work that is challenging, motivating and encourages the pupils to talk about what they have been doing.

6.1 Early Years

See Curriculum Guidance for the Foundation Stage (Early Learning Goals) and Development Matters.

6.2 Key Stage 1

See Mathematics National Curriculum 2014 Key Stage 1 programme of study (supported by the Lancashire Mathematics Team's medium term planning)

6.3 Key Stage 2

See Mathematics National Curriculum 2014 Lower Key Stage 2 programme of study (supported by the Lancashire Mathematics Team's medium term planning)

See Mathematics National Curriculum 2014 Upper Key Stage 2 programme of study (supported by the Lancashire Mathematics Team's medium term planning)

7. ASSESSMENT

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class.

In our school we are continually assessing our pupils and recording their progress. We see assessment as an integral part of the teaching process and strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

Information for assessment will be gathered in various ways: by talking to the children, observing their work, marking their work and the use of end of term tests. Key Learning Indicators of Performance (KLIPS) will be used to assess and will be used to inform future teaching and learning.

8. ROLE OF SUBJECT LEADER

The Mathematics Subject Leader is responsible for leading mathematics through the school. This includes:

- ensuring continuity and progression from year group to year group
- providing all members of staff with guidelines and a scheme of work to show how aims are to be achieved and how the variety of all aspects of mathematics is to be taught
- advising on in-service training to staff where appropriate. This will be in line with the needs identified in the Development Plan and within the confines of the school budget
- advising and supporting colleagues in the implementation and assessment of mathematics throughout the school
- assisting with requisition and maintenance of resources required for the teaching of mathematics. Again this will be within the confines of the school budget

9. ROLE OF CLASS TEACHER

- to ensure progression in the acquisition of mathematical skills with due regard to the Mathematics National Curriculum 2014 and the school's calculations policy
- to develop and update skills, knowledge and understanding of mathematics
- to identify inset needs in mathematics and take advantage of training opportunities
- to keep appropriate on-going records
- to plan effectively for mathematics, liaising with the subject leader when necessary.
- to inform parents of pupils' progress, achievements and attainment

10. EQUAL OPPORTUNITIES

We incorporate mathematics into a wide range of cross curricular subjects and seek to take advantage of multicultural aspects of mathematics eg. Islamic patterns in RE.

All children have equal access to the curriculum regardless of their gender. This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between groups.

11. PARENTAL INVOLVEMENT

We encourage parents to be involved by:

- inviting them into school twice yearly to discuss the progress of their child
- inviting parents into school in the summer term to discuss the yearly report
- inviting parents to curriculum evenings or circulating information via termly newsletters
- encouraging parents to help in classrooms

12. GOVERNING BODY

We have an identified governor for mathematics and he reviews mathematics action plans and data and is invited to attend relevant school INSET.

The mathematics governor visits the school termly to talk with the subject leader and when possible observes some daily mathematics lessons.

The mathematics governor reports back to the curriculum committee / governing body on a regular basis.

APPENDIX 1: Non-negotiables

1. All classes to display a large 100 square on the wall.
2. All classes from Year 2 to Year 6 to display a large multiplication square on the wall.
3. All classes from Y1 to Y6 to display a 'Calculations Wall, showing what calculations in a particular year group should look like (please refer to the calculations policy when making a 'Calculations Wall').
4. Emphasis/daily practise should be given to number work, eg. Place value and partitioning, adding/subtracting in 1s, 10s and 100s, recall of multiplication and division facts using a multiplication square.
5. When children are ready to start drawing their own numberlines in their maths books, these should be neat and drawn with a ruler.
6. One digit per square should be used for more formal, vertical calculations as detailed in the calculations policy.