



MATHEMATICS POLICY

1. Introduction

This policy outlines the aims, organisation and management for the teaching and learning of mathematics at Toynton-All-Saints Primary School.

The policy was developed during the Summer term of 2015, through a process of consultation between staff and governors.

It is based on the National Curriculum which was statutory for Years 1, 3, 4 and 5 as of September 2014 and for all children from Year 1- 6 as of September 2015.

It was approved by the governing body on 20.....

This policy will be reviewed in September 2017

2. Aims

Mathematics is a core subject in the National Curriculum and is a life skill. It is an essential element of communication, widely used in society, both in everyday situations and in the world of work.

Our aims in teaching mathematics are:

- To become fluent in the fundamentals of mathematics.
- To teach mathematical reasoning.
- To enable pupils to express themselves and their ideas using the language of mathematics with assurance.
- To develop positive attitudes to mathematics, recognising that mathematics can be both useful and enjoyable.
- To be able to use and apply the skills in other curricular areas.
- That all pupils can solve problems by applying their mathematics to a variety of contexts with increasing sophistication.

3. Teaching Mathematics

3.1 Organisation

Children in the Reception Class follow the Early Years Foundation Stage Curriculum, encompassing number and shape, space and measure. The classroom environment offers a wide variety of resources which the children can access independently to explore and consolidate mathematical skills and concepts. Each child will work in a small group with their teacher on a daily basis, focussing on specific areas of the curriculum to enable them to take the next steps in their learning.

Children in Years 1 to 6 receive a daily mathematics lesson of 60 minutes, which is taught by the pupil's respective class teacher, where children work in differentiated groups. The skills acquired in the numeracy lesson are applied across the curriculum in topic and science lessons as well as during Maths Curriculum days.

3.2 Teaching strategies

In order to provide the children with active and stimulating learning experiences, a variety of teaching and learning opportunities are adopted:-

- Children may work individually on a task, in pairs or in a small group, depending on the nature of the activity.
- Wherever possible practical 'real' activities and resources are used to introduce concepts and reinforce learning objectives.
- Opportunities to transfer those skills learnt, to real situations, are used whenever possible.

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- Teachers provide opportunities for the children to use the outside spaces and Wild At Heart to learn mathematics.
- Activities are planned to encourage the full and active participation of all pupils.
- Teachers differentiate tasks throughout the lesson in order to meet the needs of all abilities, which is fundamental in mixed age classes.
- Teachers place a strong emphasis on correct use of mathematical language; this is supported by key vocabulary being displayed.
- Teachers value pupils' oral contributions and create an ethos in which all children feel they can contribute.
- Teachers provide opportunities for the appropriate use of ICT to support learning.

3.3 Teaching methods and approaches

In order to provide the children with active and stimulating learning experiences, a variety of teaching and learning opportunities, are adopted:

- Children may work individually on a task, in pairs or in a small group, depending on the nature of the activity.
- A Calculation Policy has been agreed and implemented (September 2014). The mental and written methods taught are exemplified in the attached Calculation Policy documentation. The methods taught are in line with the statutory guidance in the National Curriculum document.
- ICT is used where appropriate by teachers and pupils to support teaching and learning in Mathematics.
- The children take part in a '**Maths Day**' each term, in which they apply their mathematical knowledge and understanding.
- Each child in year 1 – year 6 has a personal maths pack which contains a range of practical resources for the child's use during lessons.
- Children from years 1-6 are provided with the opportunity to develop their times tables knowledge and application in the classroom and as part of a whole school directive. Children are tested by the subject leader on a specific times table, they achieve a reward for answering them: in order, out of order and using the inverse.
- Teachers have access to TestBase which allows them to set the children tasks that apply their learnt skills.

3.4 Environment

It is important that the classroom environment supports both the learning and teaching of mathematics. The school aims to provide a mathematically stimulating environment:

- through the development and use of working walls to support learning and teaching in a lesson or series of lessons.
- through interactive displays that promote mathematical thinking and discussion
- through displays of pupils' work that celebrate achievement
- by providing a good range of resources for teacher and pupil use.
- by utilising the outside learning environment of Wild At Heart.
- Through a designated maths challenge area where children can interact and challenge themselves.

In every classroom, resources such as number lines, hundred square, place value charts and multiplication squares are displayed and available as appropriate and used for whole class or individual work.

4. Curriculum Planning

4.1 Medium Term Planning

Early Years - Teachers refer to the Curriculum Guidance for the Early Year Foundation Stage.

Key Stage 1 – Teachers refer to the Programmes of Study for their respective year group. These children are taught in mixed year groups so careful consideration is taken to ensure coverage of all objectives across the 2 years.

Key Stage 2 – Teachers refer to the Programmes of Study for their respective year group. The children in years 3 and 4 are taught in mixed year groups so careful consideration is taken to ensure coverage of all objectives across the 2 years. Children in year 5 and 6 are taught in single year group classes.

4.2 Short term planning

- Teachers produce plans that **must** include; learning objectives, success criteria, and outline activities for the mental and oral starter, whole class teaching focus, guided group work, differentiated independent tasks, and resources to be used, differentiation, key vocabulary, key questions and SEN children.
- Planning clearly shows which group the teacher will be focusing on each day and which group will be supported by the additional adults.
- Teachers evaluate units of work, making notes on pupils who have exceeded or not achieved expectations.
- Teachers use the CfBT planning package 'Progressions and Assessment through the New Curriculum'.

The medium and short term planning is collected and monitored by the maths subject leader and senior management team on the S:drive.

5. Assessment, recording and reporting

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 and feedback their successes and areas for improvement.

At Toynnton-All-Saints we are continually assessing our pupils and recording their progress using Classroom Monitor. We strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, this 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 etc. Teachers will use these assessments to plan further work.

Assessment takes place at three connected levels: short-term, medium-term and long-term.

5.1 Short-term assessments

As part of the ongoing teaching and learning process, teachers will assess children's understanding, achievement and progress in mathematics. Assessment may be based upon observation, questioning, informal testing and the marking and evaluation of work. This will inform day to day teaching and learning and provide feedback to children. Learners will also be taught to assess and evaluate their own achievements by recognising successes, learning from their own mistakes and identifying areas for improvement.

5.2 Medium-term assessments

These take place at the end of a unit/at the end of units / half termly.

5.3 Long-term assessments

Carried out towards the end of the school year to assess and review pupils' progress and attainment. This enables attainment to be tracked year on year and will inform groupings and intervention programmes.

These are made through compulsory National Curriculum mathematics tests for pupils in Years 2 and 6 (following National directives) and supplemented by the optional NFER tests in years 3 to 5. Teachers also draw upon their class records on Classroom Monitor and supplementary notes and knowledge about their class to produce a summative record. Accurate information is then reported to parents and the child's next teacher.

5.4 Reporting of assessments

Teachers will report to parents on three occasions throughout the year. The use of two parents' evenings and a written report are used to do this. During the parents' evenings, teachers will discuss children's progress and individual targets.

6. Role of Subject Co-ordinator

The Numeracy subject leader is responsible for co-ordinating 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 school.
- Assisting with requisition and maintenance of resources requires for the reaching of mathematics. Again this will be within the confines of the school budget.

7. Role of class teaching teams

- To ensure progression in the acquisition of mathematical skills with due regard to the National Curriculum and the relevant programmes of study.
- 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 subject leader when necessary.
- To inform parents of pupils' progress, achievements and attainment.

8. Equal Opportunities

All pupils will have equal opportunity to reach their full potential across the mathematics curriculum regardless of their race, gender, cultural background, ability or physical disability. This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between groups.

9. Parent/carer involvement

At Toynton-All-Saints Primary School we encourage parents and carers to be involved by:

- Inviting them into school twice yearly to discuss the progress of their child
- Inviting them to curriculum evenings and circulating information via newsletters when significant changes have been/are made to the mathematics curriculum
- Encouraging them to help in classrooms.

10. Governing Body

At Toynton-All-Saints Primary School we will have identifies governors for this subject as and when it is a School Development priority. The governors will be invited to attend relevant professional development sessions and to closely monitor and evaluate the impact of any school actions.

They will be invited to carry out 'learning walks' throughout the year to monitor the teaching and learning of mathematics within school.

11. Inclusion

The school's equal opportunities policy applies to the teaching of mathematics as to all other subjects.

11.1 Intervention programmes

Should an individual education plan be required, a programme will be put into place to meet the needs of the pupils. This will be agreed between the SENDCo and class teacher.

12. Homework

We recognise the importance of making links between home and school and encourage parental involvement with the learning of mathematics. Children in year 1 – 6 will receive weekly mathematics homework that is set by the class teacher.

Homework provides opportunities for children to:

- practise and consolidate their skills and knowledge,
- develop and extend their techniques and strategies, and
- share their mathematical work with their family
- prepare for their future learning.

See **Homework** policy for further details