

MATHEMATICS POLICY

Introduction

This policy outlines the aims, organisation and management for the teaching and learning of mathematics at St Mary and St Benedict Catholic Primary School.

It is based on the National Curriculum (2014)

This policy will be reviewed January 2025

Aims

Mathematics 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 equip pupils with the mathematics they need to become numerate.
- To develop their ability to apply mathematical skills with confidence and understanding when solving problems.
- 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 nurture a fascination and excitement of mathematics
- To be able to use and apply the skills in other curricular areas.

Teaching Mathematics

Organisation

- A daily mathematics lesson of 45 - 60 minutes is taught in Year 1 - 6.
- EYFS is being used for children at the foundation stage. At this stage pupils experience mathematics on a daily basis. This early introduction to mathematics will generally be undertaken orally and often in the context of a class theme, e.g. a particular story. Opportunities for mathematics should be developed through daily routines and all areas of learning.
- The skills acquired in the numeracy lesson are applied across the curriculum.

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 are used to introduce concepts and reinforce learning objectives.
- Opportunities to transfer skills learnt, to real situations, are used whenever possible.
- 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.
- 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.

Curriculum Planning

Medium Term Planning

Teachers use The National Curriculum to plan teaching sequences that build learning over time eg; for 2 or 3 week units. The emphasis is to develop a sequence of teaching and learning that encompasses the cycle of assess, plan, teach, practise, apply, and review through every unit. A strong emphasis on Reasoning and Problem Solving is embedded within the curriculum.

We follow the planning structure from the Collins Busy Ant Maths that organise the 7 strands of mathematics into 12 units across the year

Links and connections between the strands of mathematics are made within the units.

Each unit consists of 3 weeks of teaching

Short term planning

- The Busy Ant weekly plan is used by staff to plan learning over a series of lessons. Each teacher has access to Busy Ant daily lesson plans which are adapted to the needs of each class.
- Teachers evaluate units of work, making notes on pupils who have exceeded or not achieved expectations.

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 'Routeway' through calculation has been agreed. The mental and written methods taught are exemplified in the attached 'Routeway through calculation' documentation.
- ICT is used where appropriate by teachers and pupils to support teaching and learning in Mathematics.

Assessment, recording and reporting

Assessment takes place at three connected levels: short-term, medium-term and long-term. These assessments are used to inform teaching in a continuous cycle of planning, teaching and assessment.

Day-to-day 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.

Periodic assessments

These take place at the end of a unit/at the end of two or three units / half termly. Teachers assess key ideas, learning objectives, targets and areas of concern that have been covered during these units.

The outcomes of short and medium term assessments will be recorded on a class record sheet of National Curriculum Statutory Requirements.

Termly assessments

These are carried out towards the end of the school year to assess and review pupils' progress and attainment. The 'Progress in Understanding Mathematics Assessment' will be given termly and the results will be tracked and analysed using 'O Track' software. The results will inform groupings and intervention programmes.

Teachers will also draw upon their class records of attainment (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.

Intervention programmes

First Class @ Number is used with pupils who are under achieving in KS1 and Lower KS2.

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.

Inclusion

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

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.

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

Homework

We recognise the importance of making links between home and school and encourage parental involvement with the learning of mathematics through workshops and open afternoons.

Homework provides opportunities for children

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

Homework is given on a weekly basis.