



St Mary's Catholic Primary School

Mathematics Policy

ST. MARY'S CATHOLIC PRIMARY SCHOOL

'providing a Christ centred setting whereby all can live out the messages of Jesus with love, understanding and care'

MATHEMATICS POLICY

Vision

Our vision is to promote the growth and development of the whole person by ensuring that their curriculum experience in Mathematics is within a Catholic setting and where all members of our school community can acquire skills and knowledge which equip them for life in the 21st century.

Rationale

This policy outlines the teaching, organisation and management of the Mathematics taught and learnt at St. Mary's Catholic Primary School. The school's policy for Mathematics is based on the Primary Framework for Mathematics. The implementation of this policy is the responsibility of all the teaching staff. The Calculations Policy should also be implemented by staff to ensure continuity throughout the school of the calculations strand of the Mathematics framework.

Aims

At St. Mary's Catholic Primary School we aim to ensure that each child has the same opportunities, is offered the same experiences and is introduced to the rich and varied world of Mathematics in a supportive and stimulating way.

Each child should be able to think and solve problems mathematically by using the appropriate skills, concepts and knowledge. They should be provided with rich and enjoyable experiences related both to their individual needs and to the wider requirements of society.

Objectives

Each child should:

- Have a positive attitude towards mathematics.
- Have self-confidence in their ability to deal with mathematics.
- Be able to work systematically, co-operatively and with perseverance.
- Be able to think logically and independently.
- Experience a sense of achievement regardless of age or ability.
- Understand the appropriate underlying skills, concepts and knowledge of number, measurement, shape, space and handling

- Be able to apply previously acquired concepts, skills, knowledge and understanding to new situations both in and out of school.
- Understand and appreciate pattern and relationship in mathematics.
- Be able to communicate with peers and adults, ideas, experiences, questions, clearly and fluently, using the appropriate mathematical language.
- Be able to explore problems using the appropriate strategies, predictions and deductions.
- Have equality of opportunity regardless of race, gender, or ability.
- Be aware of the uses of Mathematics beyond the classroom.
- Encourage the use of mental calculations and efficient strategies to work out the answers.

For parents to:-

- Be actively involved in their children's mathematical learning both in school and at home.
- Understand and support the school's Mathematics and homework policy and scheme of work

Teaching Mathematics

From Year 1, all pupils will have a dedicated daily Mathematics lesson. Within these lessons there will be a good balance between whole-class work, group teaching and differentiated individual work.

Mathematics in the Foundation stage

Mathematics development involves providing children with opportunities to practise and improve their skills in counting numbers, calculating simple addition and subtraction problems, and to describe shapes, space and measure.

Homework

The Mathematics lessons will provide opportunities for children to practise and consolidate their skills and knowledge, to develop and extend their techniques and strategies, and to prepare for their future learning. These may be extended through out-of-class activities or homework. These activities will be short and focused and will be referred to and valued in future lessons. Homework is given in both Key Stages, growing in intensity as the child progresses through St. Mary's.

Information is given to parents at parents' evenings to help them work with their children at home to ensure consistency of Mathematical methods.

Cross-Curricular links

Mathematics contributes to many subjects within the primary curriculum and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will allow children to begin to use and apply Mathematics in real contexts.

Marking

As in all subjects, marking Mathematics work should be carried out in a positive, diagnostic and prescriptive way. Wherever possible, children should have the opportunity to correct their own work. Children need to be aware of why possible mistakes occurred and the methods of putting it right. (See School Marking Policy)

Equality of Opportunity/ Inclusion (provision for all groups of learners)

- **Equal Opportunities**

Equality of opportunity for all pupils will be met through creating effective learning environments; securing their motivation and concentration; providing equality of opportunity through teaching approaches; using appropriate assessment approaches and setting targets for learning.

Access to learning for pupils with special educational needs through Mathematics will include:

providing for pupils who need help with communication, language and literacy; planning, where necessary, to develop pupils' understanding through the use of all available senses and experiences; planning for pupils' full participation in learning and in physical and practical activities; helping pupils to manage their behaviour and to take part in learning effectively and safely and helping individuals to manage their emotions, particularly trauma or stress, and to take part in learning.

- **Special Educational Needs**

- Teachers will involve all pupils through differentiation and provide necessary support through use of resources and adult help including the SENCo.
- All pupils take part in the daily numeracy lesson.

- Teachers plan lessons so that all pupils can be included and can make progress in the lesson.
- In oral work teachers plan a range of differentiated questions, with some targeted at specific pupils.
- Teachers also ask open questions that allow all children to take part.
- Teachers use a wide range of visual resources to illuminate meaning.
- During whole class teaching, discreet help is given to particular children by teaching assistants where available.
- During activities, children are supported by teaching assistants where available.
- See **SEN** policy for further details.
- **Gifted and Talented**
In Key stage 2, more able children are taught in a small group sessions to broaden their mathematical understanding using challenging problem solving activities.

Links with local secondary schools have been developed to provide challenge for able pupils in Year 6.

- **Gender**
Positive attitudes towards mathematics are encouraged in all pupils regardless gender.
- **Inclusion**
The school provides effective learning opportunities for all pupils by:
 - Setting suitable learning challenges, for example for pupils who have gaps in their knowledge and for less able and more able pupils
 - Responding to pupils' diverse learning needs, for example pupils with special educational needs, from all social and cultural backgrounds, and different ethnic backgrounds
 - Overcoming potential barriers to learning and assessment for individuals and groups of pupils, for example by providing special arrangements for the assessment of some individual pupils.

Planning

The Mathematics Programme of Study (Sept 2015) is the basis for implementing the statutory requirements for maths. The exception is that a majority of pupils will move through the programmes of study at broadly the

same pace. Decisions about when to progress should always be based on the security of children's understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly will be challenged through being offered rich and sophisticated challenging materials which will develop their reasoning skills understanding, including through additional practice before moving on.

Medium and Short term planning is completed by staff who follow an agreed school format.

Recorded work

Pupils will record their work in exercise books. Other recorded work is placed in card folders and in the appropriate workbooks. Photographic evidence is also used throughout the school to record mathematical activities and attainment.

Assessment

Assessment in Mathematics reflects the school assessment policy in all aspects.

Assessments will be an informal part of every lesson to check understanding and give the teacher information, which will help to adjust day-to-day lesson plans. Opportunities for child assessment should be given to allow the children to evaluate their own and others' work.

Each term pupil progress reviews are held with the senior leadership team where attainment and progress across the year groups and vulnerable groups are discussed and identified. Assessments are used to assess progress against school and national targets. National tests are used for year 2 and year 6 annually. This is recorded onto The School Pupil Tracker online which is a web based tracker system. A summary of each child's attainment and progress is reported to parents following statutory guidance either through parental discussion or end of year reports. Information is also passed onto the next teacher. Teachers will set class targets based on each year group. These will be tested regularly and new targets will be set.

In the Foundation Stage, Learning outcomes criteria is used to assess the pupils and is recorded on the school Pupils Tracker online and 2 simple.

Target Setting

Children have targets in their books which are continually updated and revised. Pupils are involved in assessing their own work against their targets.

Assessment data is analysed in Key Stage and Senior Management meetings regularly to enable us to monitor progress and set appropriate targets. It is also monitored on a regular basis by the Maths lead.

Information to parents

Parents are continually informed when there are any specific points needing to be addressed in relation to the child's work or behaviour. Parents at our school know that whatever problems their children may have, teachers are readily available to offer support and help.

In addition to this on-going dialogue, formal Parents Evenings occur each term and reports are given out towards the end of the summer term parents are given opportunities to talk over any specific issues with teachers if necessary.

We hold curriculum evenings and 'Inspire' sessions to further inform parents of any pertinent Mathematics issues.

Mathematics and ICT

ICT is embedded into the Mathematics curriculum for both teaching and learning. Teachers have many ICT tools available to deliver lessons using the Interactive Whiteboards in each class. Teachers are informed regularly of new software and websites that are available to enhance their teaching of Mathematics.

Pupils regularly use ICT to practise and consolidate their understanding of Mathematical concepts during lessons. We have access to a number of software packages and online subscriptions to support the learning of mathematics.

Pupils can access appropriate mathematical websites at home via our school Portal.

Co-ordinator monitoring/Accountability

The role of the Mathematics Leader includes the following duties:

- To ensure the development of Mathematics within the curriculum
- To keep abreast of development by attending courses and to arrange INSET for others to attend
- To organise resources; arrange for maintenance; to purchase new resources as needs arise
- To assist and support staff in planning, assessing and implementing Mathematics

Staffing and Staff Development

All staff have regular access to training opportunities in order to keep abreast of current and new pedagogies.

The class teacher is responsible for managing Mathematics in the learning environment, within the classroom. The class teacher is also responsible for delivering and planning of Mathematics, which is monitored by the Mathematics Co-ordinator and Head Teacher.

The Mathematics Leader attends regular Local Authority meetings and training and disseminates information and developments at staff meetings and INSET days.

Resources

We have a number of published materials to support the teaching of mathematics, including Dudley maths progression document, Collins Primary Mathematics throughout Foundation, Key stage 1 and 2, and Hamilton trust.

Each class has Mathematics equipment that can be accessed by the pupils during daily Mathematics lessons. We encourage the children to use as wide a range of practical equipment as possible and as frequently as possible, in order that they learn to become familiar and confident with the range of equipment and are able to select appropriately when and where needed.

Other resources are stored centrally and are used by classes when required and returned to the central store. An inventory of Mathematics equipment is available.

Every class has a Mathematics working wall which is changed regularly.

Review of Policy

We are constantly reviewing our Mathematics teaching due to the ever changing curriculum requirements. We adhere firmly to the Primary Framework for Mathematics and the Foundation Stage Profiles.

We hold regular Mathematics meetings to discuss changes in teaching and learning of Mathematics which would possibly lead to alterations in our Mathematics Policies. In instigating any necessary changes we are also guided by our local advisory team at Saltwells and maths leads in the Nicholas Owen Mac.

This policy will be reviewed in line with the priorities of the School Development Plan in 2017.

P Berry