

St. Bernadette's Catholic Primary School

Mathematics Policy

The Mission for St Bernadette's Catholic Primary School is,

"to ensure a happy and secure learning environment where we celebrate the dignity and worth of all in our school community.

As a Christian community we recognise that in loving others we love Jesus and so help each other to reach our full potential."

Therefore the development and implementation of our Mathematics Policy supports us in achieving our mission for all the children in our care.

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

Using the National Curriculum for Mathematics it is our aim at St. Bernadette's School to develop:

- *a positive attitude towards mathematics and that all children are Masters of mathematics*
- *competence and confidence in mastering mathematical knowledge, concepts, skills and thinking*
- *an ability to solve problems, to reason, to think logically and to work systematically and accurately*
- *initiative and an ability to work both independently and in collaboration with others*
- *an ability to communicate mathematically*
- *an ability to use and apply mathematics across the curriculum and apply it in real life situations*
- *an understanding of mathematics through a process of enquiry and experiment*

Knowledge Skills and Understanding

At KS1 and KS2 teachers use the Maths Curriculum 2014 for teaching mathematics to ensure that all parts of the areas of the maths curriculum are taught.

Opportunities are offered to children to develop their mathematical knowledge and skills through tackling problems and through purely mathematical activities.

Activities are balanced between those which are short in duration and those which can be developed over a longer period.

Children are involved in both individual and group work.

Children experience open-ended as well as closed tasks.

Children are taught a range of methods of calculating.
(See calculations policy)

Children are encouraged to develop skills in using a wide range of mathematical tools through practical work.

Children are enabled to develop their personal qualities and a positive attitude to mathematics through the experiences offered to them.

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for:

- practical activities and mathematical games
- problem solving
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating.
- working with computers as a mathematical tool

SCHEME OF WORK

Our school scheme of work is a working document and as such is composed of ongoing plans produced on a week by week basis. This is developed from the White Rose HUB, supported by resources from Inspire Maths and Hamilton Trust. The progression of skills is set out for each year group in the Calculations policy, taking into consideration the needs of our children.

CROSS-CURRICULAR ISSUES

Throughout the whole curriculum opportunities exist to broaden and deepen mathematics. Teachers seek to take advantage of all opportunities.

TEACHERS' PLANNING AND ORGANISATION

Each class teacher is responsible for the mathematics in their class in consultation with the mathematics subject leader.

The approach to the teaching of mathematics within the school is based on three key principles:

- a daily mathematics lesson.
- a clear focus on direct, instructional teaching and interactive oral work with the whole class and groups.
- an emphasis on mental calculations, years 1,2,3,4 will have discrete times table lessons until all children are secure with 12x12 quick recall, out of sequence.

Teachers of the Foundation class use a very practical approach to teaching maths and children develop written methods as appropriate. (See progression of number, in calculations policy).

SPECIAL EDUCATIONAL NEEDS and DISABILITY

Children with SEND are taught within the daily mathematics lesson and are encouraged to take part when and where possible (please see the section on differentiation).

Where applicable, children's SEND support plan will incorporate suitable objectives from the Maths national curriculum and teachers keep these objectives in mind when planning work.

When additional support staff are available to support groups or individual children they work collaboratively with the class teacher.

Within the daily mathematics lesson, teachers provide daily intervention where appropriate to prevent gaps from developing. Opportunities are provided to broaden and deepen all children's knowledge by setting appropriate challenges for all children so they can aspire to be high achievers in mathematics.

EQUAL OPPORTUNITIES

St Bernadette's Catholic Primary School is an inclusive community and provision is provided for all pupils regardless of gender, English as an additional language and ability as outlined in *The Single Equality Policy*.

RECORDING PUPILS' WORK

There are occasions when it is both quick and convenient to carry out written

calculations. It is also important to record aspects of mathematical investigations. Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method of recording. (See calculations policy)

Children are encouraged to use mental strategies before resorting to a written method.

- Foundation: practical activities and informal recording
- Year One and Year two to record their work in Inspire Practice books and squared books
- Key Stage Two: (Year 3 record in Inspire Practice books) and more formal recording in squared books.

All children are encouraged to work tidily and neatly when recording their work. Date should be written numerically. When using squares one square should be used for each digit.

Marking

Each day the teacher will assess and quality mark one group of pupils to aid assessment in maths. (See marking policy for more information)

Our Tickled Pink and Green for Growth system is evident throughout the school.

At Key Stage Two, pupils can use a traffic light system to show how well they have understood the lesson.

In lower Key stage 2 children begin to traffic light their work.

Assessment and recording

The formative assessments that teachers make as part of every lesson help teachers to adjust their daily plans. They use formative and summative assessments (End of Key Stage tests and termly tests in Key Stage 2) to measure progress against the key objectives, and to help them plan for the next unit of work. Formative and summative assessments are used to evaluate progress against school and national targets. RAISE online, Lancashire Tracker and other school data are used as the basis for planning work for the new school year.

Children undertake the national tests at the end of Year 2 and Year 6, plus optional national tests at the end of Years 3, 4 and 5 to inform teacher assessment.

At the end of each term, assessments of Mathematics are recorded using KLIPS and drawing on a range of evidence to inform judgments. An evaluation of the performance of each child in mathematics is submitted at the end of each term including evaluations of the performance of sub groups such as boys, girls, SEN, EAL, PP and AG&T.

Mastery

All children are provided with the same Mastery opportunities in Maths so that they are able to think broadly and deeply about problems thus becoming Masters. Some children will need to be given same day or next day intervention to ensure that they do not fall behind the rest of the cohort.

Teaching assistants are used to support some children and to enable work to be on track with their cohort.

Resources

There is a range of resources to support the teaching of Mathematics across the school. All classrooms have an area within the classroom dedicated to mathematics resources. This area is easily accessible to all children and allows them to become familiar with all resources.

Resources which are not used or required regularly are stored centrally: Children have access to the Internet through their classroom computer and/or the shared laptop provision and are able to access MyMaths. This can also be accessed by children from home.

Monitoring, evaluation and review

Monitoring of the standards of the children's work and of the quality of teaching in Mathematics is the responsibility of the subject leader.

The work of the subject leader also involves supporting colleagues in the teaching of Mathematics, being informed about current developments in the subject by attending county subject leader meetings termly, and providing a strategic lead and direction for the subject in the school.

Strengths and weaknesses are evaluated with areas for further improvement identified. This information is shared annually with the school governors.

Samples of the children's work are reviewed together with lesson observations of Mathematics teaching across the school.

There is a named governor responsible for Mathematics. The quality and effectiveness of the Mathematics curriculum will be monitored and evaluated through regular reports to the Governors' Curriculum committee, and a vigorous programme of whole School self-evaluation.

REPORTING TO PARENTS

A report on a child's achievement and effort in Mathematics is sent to parents at the end of the Autumn and Spring terms and an End of Year Report at the end of the Summer term. Parents are given the opportunity to discuss their child's progress on these separate occasions. Teachers use the information gathered from their formative assessments to help them comment on individual children's progress.

The school will review this policy annually and assess its implementation and effectiveness. The policy will be promoted and implemented throughout the school.