



St. Oswald's R.C. Primary School

Hartley Avenue, Accrington, BB5 0NN

Tel: (01254) 234924 • Fax: (01254) 871698 • Email: head@st-oswaldsrc.lancs.sch.uk

Headteacher: Mrs Kippax

Mathematics Policy

Amended by: Sarah Lakeland June 2024

Date for review: June 2026

Signed Chair of Governors

Date

St. Oswald's R.C. Primary School, Accrington - Mission Statement

St Oswald's is proud to be a Roman Catholic school where every person is helped to do their best to succeed in a place of love, peace and safety, following the teachings of Jesus. In our school family, we are enthusiastic learners and teachers.

'Nihil Satis Nisi Optimum - Only the best will do'

Aims

In order that we might have life in all its fullness, our school will:

- **Welcome** - Be warm and welcoming towards all visitors to our school, just as Jesus welcomes us to the family of God.
- **Welfare** - Be ready to forgive as Jesus taught us. To always say sorry with honesty, courage and meaning. Show love and kindness by trying to think of the needs of others before our own. Thank God for our talents and celebrate achievements earned through working hard, aiming high, and always believing we can reach our goals. To make God's world a better place.
- **Word** - Follow the teachings of Jesus by loving, respecting and accepting one another. Give children as well as adults the chance to have a voice in the future development of our school. To place the Word of God at the centre of all that we do.
- **Worship** - To say our prayers meaningfully and worship the Lord our God joyfully with all our hearts.

Witness - Find love and kindness here and when we leave take lasting friendships and happy memories with us. To be witnesses of a Loving God who is at the heart of all we do

This policy document contributes to the Mission statement at St Oswald's School. It takes into account national and local strategies and initiatives. It is a statement of the purpose, nature and management of Mathematics taught and learnt in our school, in accordance with the requirements of Mathematics in the Curriculum 2014. It sets out a framework within which all teaching and support staff work. This policy document also states how the Mathematics Curriculum is approached within the school and how the work produced is recorded and assessed.

Purpose

- ✧ To introduce each child to the concept of Mathematics by presenting each child with a variety of experiences in order to attain his/her full potential
- ✧ To foster in each child, independence in the mathematics field, according to age and ability, in order for each child to function independently of the teacher as and when appropriate.
- ✧ To implement the aims of the 'Maths National Curriculum'.

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

Aims

Using the National Curriculum 2014 and the Lancashire planning documents it is our aim to:

- ✧ Give each child a working knowledge of mathematical functions and processes and a confidence to apply them to a variety of situations
- ✧ Equip each child with knowledge and understanding of the four rules of number and how they relate to each other
- ✧ Give children an ability to select the appropriate function to solve a mathematical problem
- ✧ Encourage each child to revise, practice and assimilate new mathematical skills and concepts and to consolidate further the skills and understanding acquired
- ✧ Foster in each child, a responsibility for his/her own learning, through both set work and investigation, in order for the teacher and child to work in a partnership in the learning process with the teacher as a guide
- ✧ Enable all children to be confident in and enjoy Mathematics

School Policy and the N.C

Knowledge, Skills and Understanding

Children at St Oswald's follow the Lancashire planning documents for teaching Mathematics to ensure that all parts of the National Curriculum are taught at a level appropriate to their ability. In the teaching and learning of Mathematics, key objectives will be addressed which will enable our children to apply knowledge and skills, solve problems of a practical and

investigative nature and communicate their ideas to others using appropriate mathematical vocab.

Breadth of Study

The children will be offered the opportunity to:

- ⤴ Experience a balanced range of mathematical activities as an integral part of the whole school curriculum
- ⤴ Develop basic mathematical skills, concepts, attitudes and knowledge appropriate to the development of the child
- ⤴ Work in a variety of ways-whole class, groups, individual dependent on the task
- ⤴ Undertake practical tasks which will enable them to develop mathematical vocabulary
- ⤴ Undertake problem solving and open and closed tasks
- ⤴ Be able to perform basic operations and apply them in a variety of situations
- ⤴ Calculate their work using a range of strategies including mental methods, pencil and paper and the use of a calculator or computer to record their work appropriately.

Schemes of Work

Our school scheme of work is a working document following the Lancashire planning documents and the EYFS framework 2021. The progression of objectives through these documents ensures continuity and progression throughout the school.

Cross-Curricular Issues

Opportunities exist within the curriculum for Mathematics to be promoted and extended and these are incorporated into the children's learning as appropriate e.g. use of measures in Science and DT. We also hold Maths days bi-annually to allow children to see the use of Maths in the wider curriculum and in the real world.

Teacher's Planning and Organisation

Class teachers are responsible for the mathematical learning in their classroom with guidance and support from the Numeracy Co-ordinator when necessary.

Three key principles underpin our approach to the teaching of mathematics in our school

- ⤴ A daily mathematics lesson
- ⤴ Interactive oral work at the start of every lesson consisting of 2 lessons a week focusing on the 'Big Maths' initiative (Infants)/ times tables (Juniors) and 2 starters focusing on the children's fundamental mental maths skills.
- ⤴ Children take part in a sticky learning starter each week to check their understanding of key concepts is retained and 1 starter on assessing the children's prior learning before the next area of Maths is planned and covered.
- ⤴ This is followed by clear focused direct teaching with the whole class and groups as appropriate. The objectives of the lesson are consolidated and extended in a focused plenary
- ⤴ An emphasis on mental calculation

Lessons are planned on a format adapted to the needs of the key stage and are monitored by the Head teacher/Co-ordinator as and when required

Daily mathematics provides opportunities for children to practice and consolidate their skills and knowledge. These can be revised or extended through homework when appropriate.

Special Educational Needs

Children with SEN are taught within the daily mathematics lesson and are encouraged to participate when and where possible. Children are given extra support and resources where appropriate to support their understanding. Challenges/adaptions to questions are given to those children who are high achievers.

Intervention groups

Borderline pupils are identified from Year 1 to Year 6 and are given support through the interventions devised by teachers. Interventions are devised by looking at the gaps children have on their KLIPs documents.

Equal opportunities

All teaching and support staff at St Oswald's are responsible for ensuring that all children irrespective of gender, ability, ethnic origin or social circumstances have access to the whole curriculum. All children have equal access to the Mathematics curriculum, its teaching and learning.

Pupils Record of their work

Children are encouraged to choose the most appropriate strategy and recording method in relation to the question posed. This will take account of mental calculations, pencil and paper methods, use of calculator and use of computer. *Ref. Marking and Feedback Policy and Calculations Policy*

Marking

Ref. Marking and Feedback Policy

Assessment and Record Keeping

Mathematics is assessed in a variety of ways including

- ✦ Observations of child or group
- ✦ AFL
- ✦ Scrutiny of work and planning
- ✦ SATs at KS1 and KS2, assessment tests at Years 3,4 and 5
- ✦ On entry assessment for Reception
- ✦ Tracking pupil progress termly and yearly
- ✦ Teacher assessment prior to starting the unit
- ✦ KLIPs grids
- ✦ 2 simple software (EYFS)
- ✦ Times tables tests

These assessments inform future planning, provide information about individuals/groups, provide summative information and provide information for parents. Oral and observational assessment occurs in the Reception class and Nursery.

Reporting to parents

Reports are completed before the end of the summer term. Parents are also given the opportunity to discuss their child's progress on two separate occasions at parent's evenings.

Early Years

An Early Years curriculum is provided for the Reception and Nursery children at St Oswald's during the FS. Many different practical experiences occur such as construction on a large and small scale, imaginative play, finger games, sand and water, cooking, shopping and observing numbers and patterns in the environment. These are planned to give the children the best opportunities for effective mathematical development and are in line with the EYFS framework 2021 for Mathematics.

Parental Involvement

Parents are invited to discuss their child's progress with the class teacher twice yearly. They are also able to discuss this progress more frequently, should they feel the need to do so, by making an appointment to speak to the class teacher or the Head teacher. Children's work to look at is available on request of parents throughout the year. Parents have been invited to Maths workshops in school, been shown what their children learn and shown the basic techniques used in school. Help sheets have also been provided for KS2 parents providing them with the strategies used in class to solve the 4 different calculations.

Monitoring and Evaluation

In addition to the monitoring of teacher's planning, the co-ordinator and Head teacher observe lessons to enable monitoring and evaluation of standards within the school to occur. The co-ordinator reviews the Maths scheme and keeps up to date with new initiatives and publications. Book scrutinies are carried out to monitor the work being produced by each year group.

Resources

Each class is equipped with the mathematical resources that the children will need on a regular basis. Resources which are not required regularly are stored centrally in the atrium.

ICT

Opportunities are provided for developing skills of Numeracy with ICT. Resources include interactive whiteboards, ITPs, iPads, software such as flashy ducks, video film, educational broadcasts and calculators. The new initiative of Big Maths is being used in a KS1 class for

mental oral starters. 'Times Tables Rockstars' has been purchased for practice towards the new Year 4 times tables test.

Times tables

Please see attached appendix for the document we follow for teaching times tables per year group.

Differentiation

Differentiation is incorporated into Mathematics lessons in various ways.

- Variation activities which become more difficult and challenge the ones who are achieving the objective
- Resources to support understanding
- Problem solving which are closed and open-ended
- Investigations where differentiation is differentiated by outcome
- Grouping according to ability so that groups can be given different tasks when appropriate. Activities are based on the same theme and usually at no more than 3 levels.

Governing Body

The Numeracy Governor- Mr. T Coogan will be invited to future training and INSET. A discussion is held between governor and subject leader each year to discuss the developments of the subject and a yearly report written for governors.

Homework

Activities are sent home on a regular basis (see homework policy) and extend or revise the learning that has taken place in class that week.