ST CHARLES' CATHOLIC PRIMARY SCHOOL

MATHEMATICS POLICY

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AGREED: SEPTEMBER 2021	REVIEWED: MARCH 2024	NEXT REVIEW: MARCH 2026

Our Mission at St Charles' Catholic Primary School is to…
LOVE, LEARN, GROW TOGETHER

St Charles' Catholic Primary School
Mathematics Policy

Vision Statement

We want all children at St Charles' Catholic Primary School to see themselves as mathematicians and to:

- Have a positive attitude towards the learning of mathematics and an enthusiasm for the subject
- Be able to identify mathematical relationships (spatial, numerical and logical) and see their relevance to everyday life.
- Be able to carry out practical activities involving measurement, estimation and calculation.
- Be able to use money in everyday situations.
- Be able to read and record mathematical statements using correct terminology and symbols.
- Be able to interpret diagrams, charts, graphs and tables.
- Have an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- Have developed an ability to use and apply mathematics across the curriculum and in real life.
- Have developed an understanding of mathematics through a process of enquiry and experiment.

School Policy and the National Curriculum

At St Charles' we offer a broad, balanced, relevant and differentiated curriculum in mathematics that is designed to meet the different needs of all the pupils in our school and the requirements of the National Curriculum 2014. Teachers from Y1 – Y6 use the National Curriculum Programmes of Study and White Rose Maths, as a basis for their planning. 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.

The programmes of study for mathematics are set out year-by-year for key stage 1 and 2. Teachers are expected to teach the children at the age related expectations for their year group (these ARE should be met by the end of the year) Relevant programmes of study are only required to be taught by the end of the key stage.

Our school curriculum for mathematics is set out on a year-by-year basis and is available online.

Planning

- White Rose Maths is used as the main structure for planning.
- The Developing Calculation Sequence should be referenced to help the planning of calculation objectives. The sequence helps to ensure progression from the teaching of the skills to using and applying. This sequence can also help you plan through all other objectives

Key Maths planning, teaching, learning and assessment resources

- Developing calculation sequence
- Calculation policy
- Maths Hub White Rose Documents and work books.
- NCETM Document
- Third Space Learning

Calculation Policy

- There is an agreed calculation policy that should be followed. The policy is stage appropriate.

Our teaching includes opportunities for:

- estimation
- exposition / modelling/ teaching of the skill
- using inverse and understanding how to use it for checking calculations.
- work with units of measurement
- missing box questions
- problem-solving, including the application of mathematics to everyday situations;
- investigational work through open ended questions.
- discussion between the teacher and pupils and between pupils themselves;
- collaborative work.
- appropriate practical work;
- consolidation and practice of fundamental skills and routines;
- investigational work through open ended questions.

- challenge for all
- ICT links

Marking and Feedback

- The learning intention will be ticked in a child's book once or twice depending on their understanding of a particular concept being taught
- Those children who produced incorrect work due to a misunderstanding of a concept will need a model or image providing for them as part of their feedback – you may also need to think about a staggered input to address this misconception the following day or follow up work as appropriate. Flexible interventions will be arranged for those children with the class teacher or LSA and an acknowledgement of this to be written in the maths book.
- An acknowledgement mark will be given to those children working independently who fully understood the lesson objective
- Time should be given for pupils to reflect and respond to marking and feedback

Presentation in Books

Pupils must be given general reminders to always take pride in their work

- Date and learning objective must be included for each piece of work
- Use 1 square for each digit and mathematical symbol
- Use a ruler appropriately i.e. to draw shapes, angles, bar charts etc
- Present all jottings and working out neatly
- Mathematical symbols must be used to show type of calculation being undertaken

Homework

Each child has a White Rose Maths Homework book. A task from the book is set each week and is based on work that has been completed in class.

The purpose of the homework for mathematics will be to improve the children's knowledge and confidence with their multiplication tables, including the inverse. A further piece of homework will also focus on further embedding the skills that the children are being taught in mathematics lessons for that week.

Working Walls

Key components of the working wall should include:

- Key vocabulary
- Examples of good work
- Challenge

Equal Opportunities

All children, regardless of their race, sex, religious belief or ability will be given equal opportunities to develop their knowledge, skills and understanding of mathematics.

Mathematics is incorporated into a wide range of cross-curricular subjects and we seek to take advantage of the many multi-cultural aspects of mathematics.

Children with English as an additional language are supported in a variety of ways, including reading of questions, repeating of instructions, opportunities to talk the language of mathematics, mathematical games, etc - see Equal Opportunities Policy and Racial Equality Policy. Access is also available to an Ipad which enables the child to translate teacher instructions or reading activities if required.

SEN
Where appropriate, some children on the SEN register may be assessed using PIVATS.

Teachers use a range of strategies to meet children's special educational needs. Lessons have clear learning objectives; work and support is differentiated appropriately and assessment is used to inform the next stage of learning.

Monitoring Exercises:
Monitoring exercises will be undertaken across the year and could include, book scrutinies, observations, learning walks, pupil interviews and moderation meetings.

Book Scrutinies
When books are monitored, at least once a term, a main focus for scrutiny will be chosen, e.g. pitch of work, more-able etc. and other key areas will be assessed including:

- Links to progression
- Work is matched to medium term planning guidelines and agreed school calculation policy
- Differentiation and challenge
- Progress and evidence of learning over time and gains in knowledge skills and understanding
- Teaching approaches used
- Marking – identifying strengths, misconceptions and areas to improve
- Presentation

All teachers will be given feedback on areas of strength and areas for improvement

Observations and Learning Walks
When observations or learning walks are undertaken, at least once a term, a main focus will be chosen, e.g. pace of learning, more-able etc and other key areas will be assessed which will include:

- Progress and mathematical gains in knowledge, skills and understanding
- Conceptual understanding including structure, images, reasoning and links to other stands and topics
- Problem solving approaches
- How misconceptions are identified and dealt with

- Use of accurate language and symbols
- General AfL strategies e.g. questioning, differentiation, use of learning environment etc.

Pupil Voice
A selection of pupils will be interviewed about their mathematical understanding and work they have undertaken across the year. Pupils should be given time before each interview to look through their maths books and reflect on good pieces of work, and where they feel further support is needed.

Standardisation/Moderation Meetings
Termly year group meetings will standardise/moderate teacher judgements against agreed criteria.

Appendix

What makes a good Maths book?

- Write in pencil
- Respond to any marking from the last lesson.

- Start a new page unless you have more than 8 lines left on the page.
- Write the date in figures – give each digit its own square.
- Leave a line and write the L.O. in words – write as you normally would – and always begin with: **To…**
- Use a ruler and pencil to underline. Leave a line before beginning work.
- When doing number work, use one square for each digit.
- If you make a mistake, use a ruler to draw one straight line through it. Only rub out drawing mistakes.
- Write the question number.
- Leave a sensible space between questions – one line or column.
- Use a ruler to draw straight lines accurately.
- Any worksheets should be glued in neatly and not overhang the page.

Never…

- Draw a line without a ruler
- Scribble out mistakes