



Context

St Alban's is an average sized Catholic Primary and Nursery School, a member of St Clare CMAT, Diocese of Hallam and works closely with the Catholic Dearne Valley Family of Schools as well as the Sheffield Catholic Schools who are part of St Clare's. Our mission as a Catholic school is to create and develop a community centred upon the teaching of Jesus Christ where all individuals are enabled to reach their full potential in all elements of their lives. Our age range is 2 to 11 with 217 on roll, 187 FTE R – Y6. St Alban's Nursery opened in September 2021, and is led by teachers and experienced qualified Early Years practitioners and has continued to grow in numbers. St Alban's serves the local parishes of St Alban's Catholic Church of Denaby and Conisbrough and Blessed English Martyrs, Mexborough all of which are in the town of Doncaster. The school is in the highest 20% of socio-economically deprived catchments in the country and is one of the 5 most deprived schools in Doncaster with a changing profile of number of Catholics attending. In recent years, there have been children with more complex needs attending and from Y4 down to our youngest learners in Nursery, 80% of children in these classes fall within the 10% most disadvantaged in the country. At St Alban's 41% children are disadvantaged and a higher than average proportion of children with SEN at 32%, most of whom have speech, language and communication (63%) and/or social, emotional and mental health (27%) needs. Children entering EYFS are doing so with increasingly significant needs and our current Reception class have 44% of children with complex SEN. Most children at St Alban's are of White British heritage, with a lower than average proportion of children with EAL at 3.23%. St Alban's has lower than national levels of stability and since January 2021 there has been a 15% increase in the number on roll (R – Y6) therefore increasing mobility factors. Prior to COVID, attendance was 97.48% but reduced significantly with 27.8% persistently absent in 21/22 academic year. During the school year 22/23, attendance improved at a significantly higher rate than the national primary rate reaching 94.03%, an increase of 2.13% on 21/22 and a reduction to less than national levels for persistent absence at 19.6%.

How is Maths a sacred subject?

The ultimate purpose of Maths is the pursuit of truth. The thinking skills inherent in the maths curriculum should inspire and enable learners to be innovative, creative, critical and analytical learners. Exploring the beauty of mathematics enables all learners to engage with the transcendent dimensions of life, freeing them to be pioneers, trailblazers and the inventors needed today and in the future. The real-world context comes first, and the theory comes second.

Aims of the Maths Curriculum at St Alban's Catholic Primary and Nursery School

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to

everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Intent of the Maths Curriculum

In line with the statutory National Curriculum, we aim 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.
- be challenged to achieve at the highest level, regardless of year group or vulnerability.
- can build on learning from the Early Years up to Year 6 and provide the foundations for their learning at KS3 and beyond.

Implementation of the Maths Curriculum

Mastery Maths' lessons are delivered daily throughout school using a 6 part 'MASTERY' lesson format.

MOTIVATE – ABC/123 direct teach – SKILLS development – TAKE IT DEEPER (Fluency) – EVEN DEEPER (Reasoning and Problem Solving) – REFLECT

- It is expected that the majority of children will progress through maths' objectives together. Only SEN children may be working at year group objectives below that of their peers. Those children identified as needing extra support in order to reach expected levels, will also receive further intervention sessions.
- Within Mastery Maths' lessons, all children should have the opportunity to use concrete objects and manipulatives to help them develop their understanding of a topic. Alongside this, children should use pictorial representations. Both concrete and pictorial representations should support children's understanding of abstract methods.
- All maths lessons should contain elements of active learning.
- Key skills, methods and facts that are modelled during lessons are recorded in Marvellous Maths Memory Books. These books will be out on desks during every lesson so that children may refer or add to them during learning activities. Children should be

encouraged to use these books as an aid to independent learning. Key Stage One classes will have flip books with key resources.

- When learning a new skill, children will do approximately 5 questions using that skill before attempting the fluency questions. Children working at Greater Depth may do a couple to show understanding and then move on to fluency. Less confident children may need to do more skills work using a variety of methods. Skills should link directly to fluency (what do children need to learn to be able to answer fluency questions). Teachers are expected to ensure that all children where possible attempt fluency and reasoning and problem solving tasks for each step.

Spoken and Written Language

Spoken and written language is modelled at all times by all adults within school in order to assist in developing children's mathematical vocabulary and ability to present a mathematical justification, argument or proof. During discussions or when giving explanations, adults should model and encourage children to answer in full sentences using appropriate sentence stems. Depending on age, children should read, spell and pronounce mathematical vocabulary correctly.

Planning

- The White Rose Maths Scheme is used as the basis for all Marvellous Maths' Mastery lessons from FS2 – Y6. Plans can be downloaded from www.whiterosemaths.com.
- Smartboard notebooks on the school Maths Mastery notebook format or White Rose PowerPoints provide evidence of short term planning. If White Rose PowerPoints are used, these are adapted as necessary to ensure they meet the needs of the class, as well as the Mastery structure.
- Lessons may be supplemented by Twinkl resources, NRICH, materials from the NCETM website/ OUP documents 'Teaching for Mastery' and other resources.
- Maths Meetings are held at least 3 times per week outside the normal Maths lesson. These are short, approximately 15-minute mental maths sessions where children practise key skills and reinforce language. Guidance such as that from Mathematics Mastery, as well as teacher assessment is used to plan the content of these sessions.

Lesson Resources

- All classes will use White Rose Maths, following the lesson by lesson overviews where possible to enable the most coverage.
- All teachers also have access to White Rose Premium resources.
- Fluency and reasoning and problem solving examples from the schemes of work may be photocopied and stuck in books with appropriate space to provide answers or the Premium worksheets may also be used.
- Worksheets may also be used as further practice for interventions and catch up sessions.
- TT Rockstars will be used to support children to learn multiplication facts, particularly for Y4.

Additional White Rose Resources:

- Lesson videos – these could be used at home, played to children who may have been absent, used for interventions or with TA groups, for SEN children who are accessing other year group materials to their peers
- True or false questions
- Flashback 4 – 4 questions used to reinforce previous learning/key concepts. These would be ideal for use in Maths Meetings.
- PowerPoints of the Reasoning and Problem Solving questions for each unit
- End of block assessments
- Interactive whiteboard resources displaying models and images

Challenge

Teachers ensure that challenge is built into every lesson by providing appropriate resources, including using concrete resources or pictorial representations to support explanations, as well as abstract thinking. Reasoning and problem solving tasks from the White Rose schemes of learning provide challenge for greater depth learners, as well as Premium resources, Nrich activities etc.

Calculation Policy

At St. Alban's, we have adopted the White Rose Calculation policy. There are two policies – one for addition and subtraction and the other for multiplication and division. These outline the models and images that we use at St. Alban's to support teaching of different concepts and their benefits.

Cross-curricular Opportunities

Children should, where possible, apply their maths to other areas of the curriculum. Opportunities for cross-curricular maths' work, such as in Science, Topic, Computing or DT, will be noted on medium term planning documents.

Home/School

Children and parents should be encouraged to consolidate and deepen children's mathematical understanding at home. This will be done through the following activities:

- ✓ Parents helping children learn their weekly number facts. These will be given out on a Monday and a 'times tables or number bonds check' will take place every Friday and the results inputted into EMAGZ.
- ✓ Times Tables Rockstars (Y2/KS2) and Numbots (FS2 – Y2).

- ✓ More specific tasks may be sent out for Y2 and 6 in preparation for SATs.

Marking, Feedback and Assessment

- See also Teaching, Learning and Assessment Policy
- During Maths' lessons, teachers, TAs and pupils should try to *mark as much work as possible* so that children can have immediate feedback and time to act upon it within the lesson. All corrections should be done in purple and teacher feedback in green. Any gaps or intervention work done in books should be identified 'Gaps' and include the date and the initials of the person who carried out the intervention.
- Interventions may take place within the lesson for focus children or at another time of the day for SEN children. Additional 'catch-up' lessons may take place at lunchtimes or after school.

Displays/Learning Environments

Displays should reflect a Mastery approach for maths and should be working walls. They should include:

- The maths language that children will be using in each lesson
- Concrete, pictorial and abstract representations for each step/unit.
- A hands-on interactive challenge activity
- Anything that children may need to refer to in order to achieve their year group objectives
- WAGOLLS

Impact of our Maths Curriculum

The Maths Curriculum at St. Alban's is designed to ensure:

- children become confident mathematicians, who can apply their skills in a variety of ways.
- children read, spell, understand and use mathematical vocabulary confidently and correctly.
- children explain their mathematical thinking using full sentences.
- children reach the national expected standards or higher at the end of FS2, Y2 and Y6.
- children achieve the minimum pass mark or better in the Multiplication Tables Check at the end of Y4.

Review Date: September 2024

Appendices

Appendix 1: List of websites and documents

[White Rose Maths | Free Maths Teaching Resources | CPD Training](#)

[National curriculum in England: mathematics programmes of study - GOV.UK \(www.gov.uk\)](#)

NCETM (<https://www.ncetm.org.uk/>)

DFE Maths Guidance 2020 - <https://www.ncetm.org.uk/in-the-classroom/support-for-schools-addressing-ongoing-coronavirus-impact/2020-dfe-mathematics-guidance/>

NRICH (<https://nrich.maths.org/>)

<https://play.ttrockstars.com/>