OUR LADY AND ST BENEDICT CATHOLIC ACADEMY
Maths STATEMENT

Our Mission Statement:
'Loving, Learning and Looking forward with Christ.'

Curriculum Leader: Mrs S Hepworth

Following the example of Our Lady and St. Benedict we are rooted to Christ in all that we say, do and think. Within our safe Catholic family we love, learn and ensure children are ready for their next step in society with Christ as their purpose.

Intent

Mathematics at Our Lady and St Benedict's is a creative and highly interconnected subject, underpinned by the three statutory aims of the National Curriculum: fluency, reasoning and problem solving.

Our intent is for all children to become fluent mathematicians, who are able to confidently recall and apply mathematical knowledge and demonstrate conceptual understanding. We aim for all of our children to be proficient users of mathematical language, which will support them in their mathematical reasoning in different contexts. Our ambition is for children to become competent problem solvers, through applying their mathematical knowledge to a wide range of problems, in maths lessons, other subjects and in 'real life'. Through maths, we aim for children to become language rich and independent communicators.

In mathematics, we implement an inclusive curriculum that meets the statutory requirements of the National Curriculum. We use 'Power Maths' as a spine in Reception, KS1 and KS2. In Nursery, we use Master the Curriculum which is mapped against the Development Matters documentation and is aligned with White Rose Maths. In turn this provides a sequenced, progressive and aligned curriculum from Nursery to Year 6, which is additionally supported by other well aligned mathematical opportunities.

Daily maths lessons take place.

Implementation

We use the Power Maths White Rose resources, which have been judged as fully delivering a mastery approach and are on the Department for Education's list of recommended textbooks.

The curriculum overview outlines what each year group is learning and when, supported by progression documents matched to the National Curriculum. Flexibility is built into the Power Maths programme so there is no one-to-one mapping of lessons and concepts meaning teaching can be paced according to the class. While some children will need to spend longer on a particular concept (through interventions or additional lessons), others will reach deeper levels of understanding.

The Power Maths scheme has been government approved (in part) because it is unpinned by an evidence informed pedagogical sequence. It has been written so that careful sequencing of content, instruction and rehearsal shows pupils new and consistent patterns of useful information. These then form the basis of further concepts, rules and principles that pupils store in their long-term memory. Lesson follow the format of 'flashback' (recapping prior knowledge), Discover, Share, Think Together, Independent activities and Reflect – adopting the 'I do, We do, You do' approach.

In addition, children complete maths practice exercises using daily mini maths homework and fluency questions. Declarative knowledge is supplemented through NCETM Mastering Number and Times Table Rockstars. Procedural knowledge is supplemented through Mini maths homework and daily fluency sessions.

During the early years of Power Maths, there is a deliberate focus on foundational knowledge, particularly proficiency in number as this gives pupils the ability to progress through the curriculum at increasing rates later on. Therefore, the curriculum is designed to focus on depth over breadth, covering fewer topics but in more detail.

A series of stimulating lessons are planned, with clear learning objectives, to develop fluency, reasoning and problem solving and the use of subject-specific vocabulary.

Children are encouraged to physically represent mathematical concepts using concrete resources, pictorial (models and images) to demonstrate and visualise abstract ideas, alongside numbers and symbols.

Concrete - Examples include structural apparatus such as cubes, counters, 3D shapes or weighing scales as well as contextual objects such as teddies or coins for counting or sorting.

Pictorial - Examples include children's own mark making and simple drawings, sketches, number lines and diagrams.

Abstract - Examples include young children's emergent graphics, early number formation, number sentences and written expanded methods.

Fluency is a fundamental aspect of mathematics, ensuring that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately.

Children become confident in the two types of fluency:

Conceptual fluency, e.g. exploring the five strands of place value, (counting, recognition of cardinal numbers, knowing what each digit in a number represents, understanding our base-10 structure and exchanging), what an equivalent fraction is and identifying key features of different representations of data.

Procedural fluency, e.g. +- x ÷ calculation methods linked to whole numbers, fractions and decimals and exploring step-by-step mental and written methods.

Children are given regular opportunities to recall known facts, develop number sense, know why they are doing what they are doing and know when it is appropriate and efficient to choose different methods and will apply skills to multiple contexts e.g. multiplying and dividing by 10 to convert units of measurements.

Reasoning and problem solving is planned and interwoven into the mathematics curriculum.

Reasoning questions are explicitly taught and modelled through the use of discussion, maths partner talk, manipulatives, written words using stem sentences.

Press here for the structure of Power Maths lessons: https://primarysite-prod-sorted.s3.amazonaws.com/our-lady-and-st-benedict/UploadedDocument/068f5d63-8f99-400e-8e6f-b0a53eece981/the_power_maths_lesson_sequence.pdf

Impact

Our well-planned maths curriculum ensures that children are fluent and confident mathematicians, who exude an enjoyment and curiosity about the subject. Our children are enthusiastic and competent mathematical problem solvers, within maths lessons and across the curriculum. Children are well prepared for the next stage in their education and mathematics in their lives.

The impact of effective maths teaching should be highly measurable both in lessons and over time. Assessment for Learning opportunities are present during each stage of the lesson (Discover, Share, Think Together, Independent work). Teachers are highly responsive to pupils' needs throughout the lesson, and then feedback 'in the moment' addresses any misconceptions. Where we see children not keeping pace, teachers respond rapidly to support. All this assessment is used to support teachers' future decisions about developing children into lifelong mathematical learners.

Children are tested on a termly basis (half termly in Year 6) and support given where appropriate.

Overview

At Our Lady and St Benedict's, we have acted upon the National drive to improve maths and develop mathematical learners and thinkers. We have connected with our local Maths Hub as well as seeking support, guidance and training from external Maths Mastery Experts. We quality assure all CPD, ensure it is evidence informed, and design it so that the teachers have the best opportunity to deliver quality first teaching to the children here at Our Lady and St Benedict's.

The importance of strong middle leadership and collaboration within our Multi Academy Trust is recognised and highly valued. It is evidenced by regular inter-academy engagement and support alongside regular subject leader time in order to drive maths forward in the school. Maths has been priortised in our school improvement plan.

Please click here for the Power Maths overview to see what your child is currently learning:
https://primarysite-prod-sorted.s3.amazonaws.com/our-lady-and-st-benedict/UploadedDocument/822d4932-8ae2-4dd7-914e-57574f008c71/power-maths-overview.pdf