Notre Dame du Rosaire

Catholic School

"Learning Together, Loving God"

Maths Policy

September 2022 - to be reviewed September 2023

INTENT

Our mission statement 'Learning together, loving God' encapsulates the balance between learning about ourselves, others and knowledge of our world, with the aim of converting this knowledge into understanding and skills that combine to serve our community as a whole.

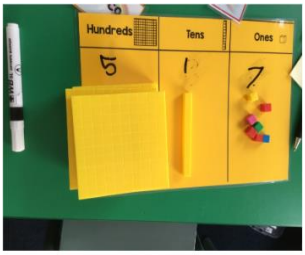
At Notre Dame du Rosaire we understand that Maths is an important tool for everyday life and with this in mind, we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them throughout their lives. We aim to develop a love of learning, resilience and persistence.

We cover the breadth of the Bailiwick Curriculum and augment this with the White Rose Maths curriculum; a curriculum designed to provide students with a solid foundation in mathematics. Our curriculum content has been designed to be well sequenced, in order to promote a depth of understanding and development of mathematical thinking skills. Our intent is that all children will leave Notre Dame with the ability to think mathematically and solve problems with confidence.

IMPLEMENTATION

At Notre Dame, every learning session includes the opportunity to develop fluency skills, construct chains of reasoning using relevant knowledge alongside relevant terminology and solve increasingly complex problems in a systematic and coherent way. We ensure that our classroom lessons follow the 'Concrete, Pictorial, Abstract' model, and we use a range of strategies to help the children to understand new concepts and apply mathematical skills in a variety of contexts themselves. These include
teacher modelling and shared investigation, before the children are expected to apply their skills independently.







The implementation of our curriculum ensures balanced coverage of the main themes outlined in the Bailiwick Curriculum: Number, Shape and Measure, Data Handling and Algebra.

Our learners will build secure knowledge of the following:

- the range of ways mathematics can be used to solve practical problems, model situations, make sense of data and inform decision making
- different types of numbers and what they represent
- how numbers can be used for measurement, quantification and comparison and applied in different contexts
- how to use geometry to explore, understand and represent shape and space
- how likelihood and risk can be understood, quantified and used in everyday life.

Vocabulary



Our maths lessons include explicit reference to vital mathematical vocabulary and the use of stem sentences to support and encourage all children to communicate their ideas with mathematical precision and clarity. These sentence structures often express key conceptual ideas or generalities and provide a framework to embed conceptual knowledge and build understanding.

EYFS

At Notre Dame, we understand the importance of early experiences of maths, and have committed to the Bailiwick Early Years Quality Standards Framework within our Early Years setting. This approach places a significant emphasis on developing a strong grounding in number – understanding that this is a necessary building block for children to excel in the subject. The two key Early Learning Goals for mathematics are:



Number: Number composition, subitising, recall of bonds to 5 and 10, counting reliably with numbers from 1 - 20, verbally counting beyond 20, comparing quantities and solving problems including doubling, halving and sharing.



Shape, Space and Measure: Use everyday language to talk about size to compare (quantities) and to solve problems involving weight, capacity, position, distance, time and money, describing and representing patterns and exploring characteristics of everyday objects and shapes and use mathematical language to describe them.

Our teachers provide creative and engaging opportunities for children to ignite their curiosity and enthusiasm for the subject, while focusing on the three prime areas of: Personal, Social and Emotional Development, Physical Development and Communication and Language. Activities and experiences are frequent and varied, and allow children to build on and apply understanding of Numbers to 10. Concrete manipulatives are a key focus within sessions, as is the use of pictorial representations including Tens Frames and Part/Whole Models. Children are actively encouraged to use mathematical terminology within their understanding, with a focus on developing positive attitudes and interest in the subject.

Financial Literacy

Alongside our mathematics curriculum, we also offer our children opportunities to develop their Financial Literacy. Through first-hand experiences, practical activities, discussions and debate our children develop a range of skills in: managing money and financial planning; understanding and managing earnings; debt, benefits and credit and managing a budget in a household and work-related situations.

Developing secure financial literacy skills is an essential life skill and will enable our children, later in life, to ask the right questions to make well informed decisions that have both personal and societal consequences.

IMPACT

Our progressive curriculum is designed to stimulate curiosity, foster deeper thinking and develop problem-solving skills, to equip our children with the skills they need in life beyond school. Our children will learn to explore and explain their ideas using symbols, diagrams and spoken and written language, with multiple opportunities to revisit and consolidate their learning throughout each year.

At Notre Dame, we aim for each child to be confident in each yearly objective and develop their ability to use this knowledge to develop a greater depth understanding to solve varied fluency problems as well as problem solving and reasoning questions. However, decisions about when to progress are based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly are challenged through rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material consolidate their understanding, including through additional practice, before moving on.

Formative Assessment: Teachers carry out formative assessment through AfL in each session and feedback is given to children verbally, through self/peer assessment and through marking. Teachers then use this assessment to influence their planning. Children are rapidly identified as needing further challenge or additional support, and we ensure that this is provided in a timely manner.

Summative Assessments: Children complete 'End of Block' assessments for each phase of learning and APP (Assessing Pupil Progress) assessment at the end of each term. These assessments are used to further inform planning for the next phase of learning. We survey our staff and pupils to identify their perception of mathematics and identify CPD needs.

Curriculum Map

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<tr><th colspan="14">Autumn</th></tr>
<tr><th>Week</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th></tr>
<tr><td>EYFS</td><td colspan="3">Getting to Know You!</td><td colspan="3">Just Like Me!</td><td colspan="3">It's Me, 1, 2, 3!</td><td colspan="4">Light & Dark</td></tr>
<tr><td>YEAR 1</td><td colspan="4">Number
Place Value</td><td colspan="4">Number
Addition and Subtraction</td><td colspan="2">Geometry
Shape</td><td colspan="2">Number
Place Value</td><td>Consolidation</td></tr>
<tr><td>YEAR 2</td><td colspan="3">Number
Place Value</td><td colspan="5">Number
Addition and Subtraction</td><td colspan="2">Measurement
Money</td><td colspan="2">Number
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Division</td></tr>
<tr><td>YEAR 3</td><td colspan="3">Number
Place Value</td><td colspan="5">Number
Addition and Subtraction</td><td colspan="4">Number
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<tr><td>YEAR 4</td><td colspan="5">Number
Place Value</td><td colspan="3">Number
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Area</td><td colspan="3">Number
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<tr><td>YEAR 5</td><td colspan="4">Number
Place Value</td><td colspan="4">Number
Addition and Subtraction</td><td colspan="4">Number
Multiplication and Division</td><td colspan="2">Number
Fractions</td></tr>
<tr><td rowspan="2">YEAR 6</td><td colspan="3" rowspan="2">Number
Place Value</td><td colspan="5">Number
Addition & Subtraction</td><td colspan="5" rowspan="2">Number
Fractions</td><td rowspan="2">Measurement
Converting Units</td></tr>
<tr><td colspan="5">Multiplication and Division</td></tr>
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Spring												
Week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
EYFS	Alive in 5!				Growing 6, 7, 8				Building 9 & 10			To 20 and Beyond
YEAR 1	Number **Addition and Subtraction**				Number **Place Value**			Measurement **Length and Height**		Measurement **Weight and Volume**		Consolidation
YEAR 2	Number **Division**	Statistics **Data Handling**	Geometry **Properties of Shapes**			**Number / Place Value Consolidation**	Number **Fractions**			Measurement **Time**		**Problem Solving**
YEAR 3	Number **Multiplication & Division**			Measurement **Length & Perimeter**			Number **Fractions**			Measurement **Mass & Capacity**		
YEAR 4	Number **Multiplication & Division**			Measurement **Length & Perimeter**		Number **Fractions**				Number **Decimals**		
YEAR 5	Number **Multiplication & Division**			Number **Fractions**		Number **Decimals and Percentages**			Measurement **Perimeter and Area**		**Statistics**	
YEAR 6	**Ratio**		**Algebra**		Number **Decimals**		Number **Fractions Decimals Percentages**		Measurement **Area, Perimeter and Volume**		**Statistics**	

Summer												
Week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
EYFS	To 20 and Beyond			First, Then, Now			Find My Pattern			On the Move		
YEAR 1	Number **Multiplication & Division**			Number **Fractions**		Geometry **Position & Direction**	Number **Place Value**		Measurement **Money**	Measurement **Time**		Consolidation
YEAR 2	Measurement **Length & Height**			Geometry **Position & Direction**		**Place Value & Number Consolidation**			Measurement **Mass, Capacity & Temperature**			Statistics **Data Handling**
YEAR 3	Number **Fractions**		Measurement **Money**		Measurement **Time**			Geometry **Shape**		**Statistics**		Consolidation
YEAR 4	Number **Decimals**		Measurement **Money**		Measurement **Time**	Consolidation		Geometry **Shape**		**Statistics**	Geometry **Position and Direction**	
YEAR 5	Geometry **Shape**			Geometry **Position & Direction**		Number **Decimals**			Number **Negative Numbers**	Measurement **Converting Units**		Measurement **Volume**
YEAR 6	Geometry **Shape**				Geometry **Position and Direction**		Measurement **Converting Units**	**Statistics**		**Problem Solving and Investigations**		