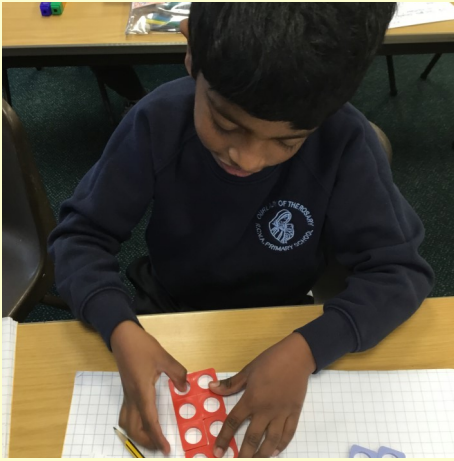




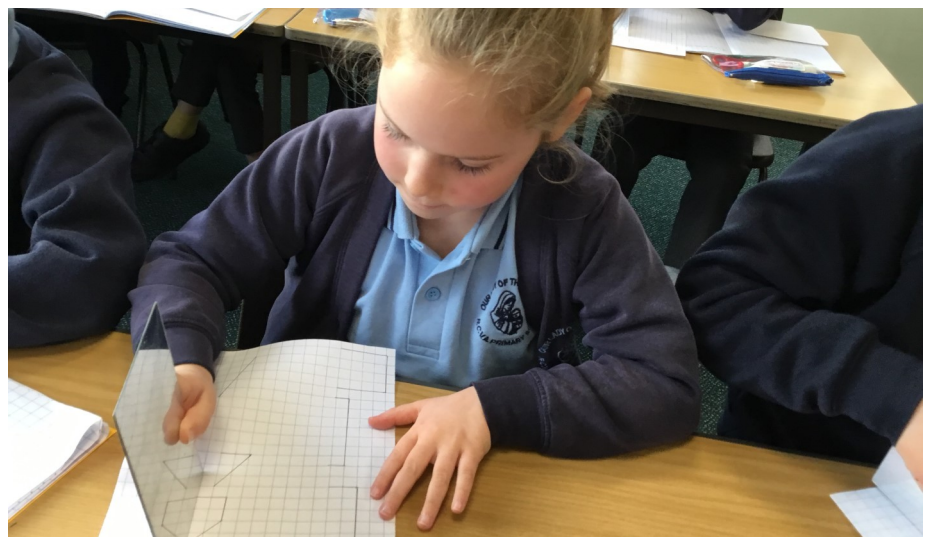
Maths

Curriculum Statement

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.

Our Key aims

- Ensure 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.
- Ensure all pupils reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- ♦ Ensure all pupils 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.



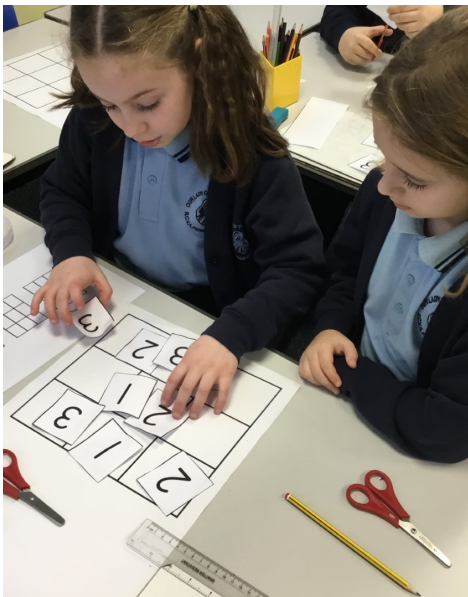
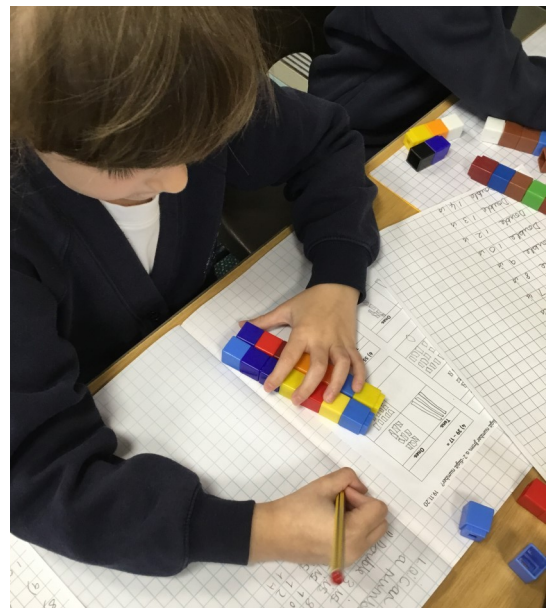
What does this look like?

Our children:

- ♦ Study Maths each day covering a broad and balanced Maths curriculum including number, calculations, geometry, measurement and statistics.
- ♦ Reason and problem solve through puzzles and challenges to develop pupils' understanding, enjoyment and curiosity.
- ♦ Teach pupils mathematical vocabulary which will support their knowledge and understanding.

Our children's books:

- ♦ Have a date and learning objective written at the start of each piece of work.
- ♦ Show children are responding to their next step marking.
- ♦ Demonstrate clear evidence of learning over time and show that learning is suitably challenged.



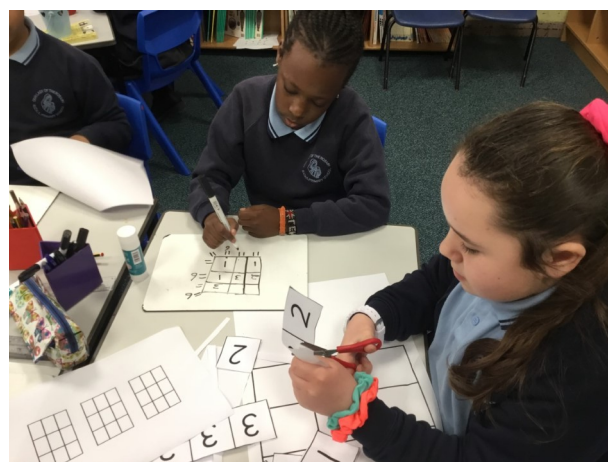
Our learning environment:

- ♦ Working walls to support learning.
- ♦ Whiteboards to support with mental maths.
- ♦ Available resources, such as place value charts, hundred squares and times tables grids.
- ♦ Manipulatives to aid mathematical understanding.



Key characteristics of Mathematics at Our Lady

- An understanding of the important concepts and an ability to make connections within mathematics.
- A broad range of skills in using and applying mathematics.
- Fluent knowledge and recall of number facts and the number system.
- The ability to show initiative in solving problems in a wide range of contexts, including the new or unusual.
- The ability to reason, generalise and make sense of solutions.
- The ability to use our Habits of Mind of Thinking Interdependently and Persistence when faced with challenges, showing a confidence of success.
- The ability to embrace the value of learning from mistakes and false starts.
- Fluency in performing written and mental calculations and mathematical techniques.
- A commitment to and passion for the subject.
- A wide range of mathematical vocabulary.



Curriculum Coverage

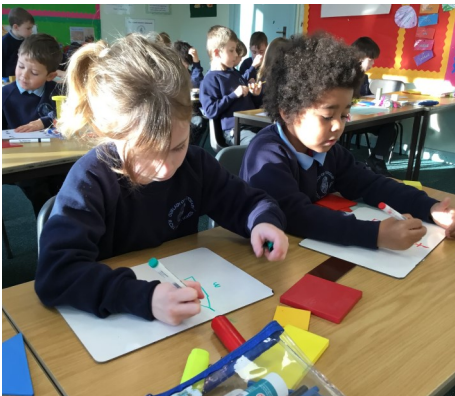
Year group	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Reception	Number and place value – numbers to 5 Addition / Subtraction – sorting into groups (size, amounts, differences)	Number and Place Value – comparing groups Addition / subtraction One more / one less Subitising	Number bonds to 5 Numbers to 10 2D and 3D shapes	Addition and subtraction Weight Patterns	Counting on and back Numbers to 20 Capacity Length and height	Doubling Halving and sharing Odds and evens
Year 1	Place value within 10 Addition and subtraction within 10	2D shapes and properties 3D shapes and properties Place value within 20 Addition and subtraction within 20	Money Counting in 2's, 5's and 10's Doubling / Halving	Measurement Heights Weight Capacity Measurement: Time	Place value within 50 Directions and position Multiplication Division	Place value within 100 Addition and subtraction Recap: Money, shapes, doubling and halving Maths games
Year 2	Place Value Addition and Subtraction	Addition and Subtraction Multiplication Division	Money Fractions	Measurement Time 3D shapes	Multiplication Division Temperature Statistics	Fractions Measurement
Year 3	Place Value Addition and Subtraction	Multiplication and Division Fractions Geometry	Arithmetic - four operations Fractions Money Measurement	Time Statistics Perimeter Angles	Place Value Multiplication and Division Decimals	Fractions Time
Year 4	Place value Addition and subtraction Multiplication Angles	Multiplication and Division Factors Negative numbers Money Geometry	Fractions Decimals Perimeter Area	Measurement Time Data handling Roman numerals	Fractions Decimals Geometry	Multiplication and Division Time
Year 5	Place value Addition and subtraction Multiplication and division Statistics	Multiplication and division Addition and subtraction Geometry Multiplication and division Measurement Perimeter and Area Geometry	Multiplication and division Fractions, decimals and percentages Geometry Perimeter and area	Multiplication and division Fractions, decimals and percentages Measurement Statistics	Place value Addition and subtraction Multiplication and division	Fractions, decimals and percentages
Year 6	Place Value Four operations Fractions	Fractions Geometry Multiplication Division	Fractions Decimals Percentages Algebra	Algebra Ration Fractions Decimals Percentages	Place value Addition and subtraction Multiplication and division	Fractions, decimals and percentages Algebra



Enrichment opportunities

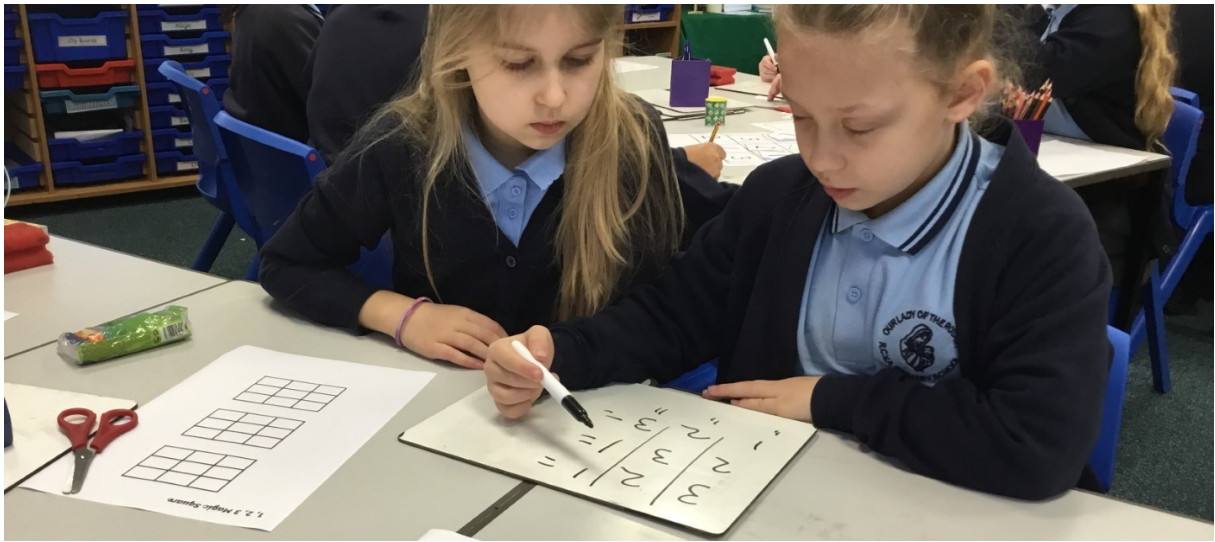


- ♦ Selected Year Six pupils take part in the Primary Maths Challenge.
- ♦ Pupils take part in multiple Sumdog and Times Tables Rockstars competitions throughout the year, competing both locally and nationally.
- ♦ We run an annual Mathematics day which includes a visit from the Happy Puzzle Company, other class-based maths, practical activities and enjoyment of maths through stories, poems and songs.
- ♦ Disadvantaged pupils and those needed support to 'narrow the gap' are provided with additional targeted support by their class teacher or a teaching assistant.
- ♦ There is a weekly lunchtime homework club for those pupils who are unable to do their homework at home and for pupil who wish to do additional computer-based mathematical learning.



Contributing to the wider world

- ♦ We believe that everybody plays an essential role in their community and it is important that we teach children how to contribute. In maths, children learn to show initiative in solving problems, including the new and unusual, and to think independently and show persistence. This links with our Habits of Mind.
- ♦ Maths has long-term impact on employment opportunities. It is key in various industries including business, engineering, science, medicine, computing and finance. We want to promote these career paths for our children by providing them with strong mathematical foundations.



Assessment, Monitoring & Evaluation

- ◆ Where appropriate, subsequent marking after the lesson provides an appropriate question for each child to link their learning from one day to the next.
- ◆ Teachers use a variety of formative assessment during lessons to work out which areas require most re-visiting and which topics have been best understood. They then use this information to provide next step marking and adapt following lessons.
- ◆ Leaders complete regular maths 'drop ins' each year, which include observations of the children at work and the impact the teaching has on their progress and enjoyment of maths. Part of this is to assess the learning for children with SEN and Pupil Premium.
- ◆ Each term, children complete termly summative 'NFER' assessments to monitor progress and attainment, inform planning and provision needs. In addition to this, results from multiplication challenges are monitored so teachers and the curriculum leader can identify which children are developing the required fluency for the Multiplication Tables Check in Year 4.

Engaging with parents

We encourage parents to take an active interest in their children's mathematical education. You can:



Support your child with the homework they receive.

Help your child to learn their number bonds and key number facts.

Have positive conversations about maths with your child and its importance in everyday life.



Help your child to learn and retain times tables and related facts.

Help to teach your child mathematical 'life skills', such as learning to tell the time and read timetables, recognising coins and notes and calculating change.

