




Year One Mathematics	Intent	Implementation	Impact
	<p>At St John Vianney Catholic Primary School, we recognise that Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. We aim to provide a high-quality mathematics education with a mastery approach so that all children:</p> <ul style="list-style-type: none">• become fluent in the fundamentals of mathematics;• reason mathematically;• can solve problems by applying their mathematics. <p>(National Curriculum 2014)</p> <p>Our intent for mathematics is to teach a rich, balanced and progressive curriculum using Maths to reason, problem solve and develop fluent conceptual understanding in each area. Staff are supported and aided in their roles ensuring confidence in the skills and facts they are required to teach. Lessons are child focused and maths is kept fun and current in school.</p> <p>Our curriculum allows children to better make sense of the world around them relating the pattern between mathematics and everyday life. Our policies, resources and schemes support our vision e.g. our calculations policy linked to our Mastery Text Book resource, Power Maths, which is based on White Rose Maths, and NCETM Teaching for Mastery. The mapping of Mathematics across school shows clear progression in line with age-related expectations and the National Curriculum.</p> <p>Mathematics in our school is enhanced by our focus on additional practise of key mathematics skills through Assertive Mentoring Weekly Skills Checks and our focus on key instant recall facts (KIRFs). We promote and encourage over learning of key facts through our use of Numbots and TT Rockstars competitions. We constantly seek to improve our provision and we are proud of enhancements made through our collaboration with partner schools within our M.A.C. and our work to develop our mastery approach to mathematics through our involvement with the Central Maths Hub.</p>	<p>The curriculum hours for mathematics are non-negotiable and followed by all staff.</p> <p>Teachers plan three lessons with a number focus per week and two lessons linked to either geometry, statistics or measures.</p> <p>Knowledge organisers linked to each of the mathematical areas, support the children with their learning.</p> <p>High quality teaching responds to the needs of children. Teachers use questioning well and aim to identify and address any misconceptions at an early stage.</p> <p>Planning: Lessons are planned and sequenced so that new knowledge and skills build on previous learning. Staff refer to the Calculation Policy when teaching formal methods but also understand that sometimes children find their own efficient methods along the way. Number bonds and times tables practice take place weekly to give children the opportunity to practise and improve their rapid recall of key mathematics facts.</p> <p>Teaching: At St John Vianney we employ a variety of teaching styles and opportunities for children to learn and develop their Mathematical skills and competencies, both individually and collaboratively. Our pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.</p> <p>Concrete – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.</p> <p>Pictorial – children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems.</p> <p>Abstract – With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence.</p>	<p>The impact of our mathematics curriculum is that children understand the relevance of what they are learning in relation to real world concepts. We have fostered an environment where Maths is fun and where it is accepted that sometimes we will make errors on our journey to finding an answer. The children understand that learning from mistakes is a key skill.</p> <p>The children's Mathematics books demonstrate the use of a range of activities and show evidence of fluency, reasoning and problem solving. Positive verbal and written feedback and early intervention support the children to strive to be the best mathematicians they can be and ensure that a greater proportion of children are on track.</p> <p>The Mathematics leader, in collaboration with the Senior Leadership Team, takes responsibility for the monitoring of the Mathematics curriculum and the standards achieved by the children.</p> <p>The Mathematics leader monitors for appropriate pitch and progression at least once every half term. This monitoring takes the form of:</p> <ul style="list-style-type: none">• Lesson observations with written feedback;• Learning walks and pupil voice conversations;• Planning scrutiny followed by support where necessary;• Book scrutiny per term;• Termly data analysis;• Moderation with other Mathematic Subject Leaders with the M.A.C. <p>Data is collected half-termly and reported to SLT. All teachers contribute to a termly Pupil Progress Meetings, where the data is analysed to highlight those pupils not meeting expectations. The meetings focus on target setting and identifying the next steps to support the children to make good or better progress.</p>



Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions	Geometry - Properties of Shape	Geometry – Position and Direction	Measurement (Length, Mass, Capacity)	Measurement (Time and Money)
I can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	I can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	I can recognise, find and name a half as one of two equal parts of an object, shape or quantity.	I can recognise and name common 2-D shapes (for example, rectangles, including squares, circles and triangles).	I can describe position, direction and movement, including whole, half, quarter and three-quarter turns.	I can compare, describe and solve practical problems for lengths and heights (for example, long/short, longer/shorter tall/short, double/half).	I can describe time (for example: quicker, slower, earlier, later).
I can count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens.	I can represent and use number bonds and related subtraction facts within 20.		I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	I can recognise and name common 3-D shapes (for example, cuboids, including cubes, pyramids and spheres).		I can compare, describe and solve practical problems for mass/weight (for example, heavy/light, heavier than, lighter than).	I can sequence events in chronological order using language (for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).
I can, given a number, identify one more and one less.	I Can add and subtract one-digit and two-digit numbers to 20, including zero.					I can compare, describe and solve practical problems for capacity and volume (for example, full/empty, more than, less than, half, half full, quarter).	I can recognise and use language relating to days of the week, weeks, months and years.
I can identify and represent a number using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \quad - 9$					I can measure and begin to record lengths and heights.	I can tell the time the time to the hour and half past the hour and raw the hands on a clock face to show these times.
I can read and write numbers 1 to 20 in numerals and words.	I can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations an arrays with the support of the teacher.					I can measure and begin to record mass and weight.	I can measure and begin to record time (hours, minutes, seconds).
						I can measure and begin to record capacity and volume.	I can recognise and know the value of different denominations of coins and notes.



End of Key Stage 1 Outcomes

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the 4 operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency.

Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at Key Stage 1.