

Onslow Infant School: Maths Curriculum Map

	EYFS	KS1	
	YR	Y1	Y2
Curriculum Purpose of study:	Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built.	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.	
Curriculum Aims:	<p>In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.</p>	<p>The national curriculum for mathematics aims to ensure that all pupils:</p> <ul style="list-style-type: none"> ♣ 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. <p>Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.</p> <p>The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged</p>	

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		<p>through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.</p>
<p>Curriculum Subject Content / Attainment:</p>	<p>ELG: Number</p> <ul style="list-style-type: none"> • Have a deep understanding of number to 10, including the composition of each number; • Subitise (recognise quantities without counting) up to 5; • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. <p>ELG: Numerical Patterns</p> <ul style="list-style-type: none"> • Verbally count beyond 20, recognising the pattern of the counting system; • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 	<p>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 four operations, including with practical resources [for example, concrete objects and measuring tools].</p> <p>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.</p> <p>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.</p> <p>Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.</p> <p>(please see our school skills progression document)</p>

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	EYFS	Y1	Y2
Autumn 1	<p>Topic: Journeys – all about me</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Everyday language related to time • Matching, sorting and comparing amounts • Comparing size, mass and capacity • Exploring pattern • 2d shape (sorting and making patterns) and 3d shape (block play) <p>Key Questions:</p> <ul style="list-style-type: none"> • What do you think? • What can you see? - What have you made? • What have you found out? • How do you know? <p>Onslow:</p> <ul style="list-style-type: none"> • Introduction to maths areas inside and outside 	<p>Topic: Great British Tour</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Place Value (within 10) • Number: Addition and Subtraction (within 10) <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • What can you see? • What does this sign mean? • How do you know? <p>Onslow:</p> <ul style="list-style-type: none"> • Applying maths in the outside area. • Special helper watches – telling the time to o'clock • Tea Party WOW day – sharing food and drinks (fractions, division, capacity) 	<p>Topic: Into the dark (Florence Nightingale and Great fire of London)</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Place Value • Number: Addition and Subtraction <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • -What does this sign mean? • How can we work this out? - Which method should we use? <p>Onslow:</p> <ul style="list-style-type: none"> • Great Fire of London WOW Day – Baking Bread (measurement)
Autumn 2	<p>Topic: Journeys – celebrations</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Representing and comparing and numbers 1-5, including one more and one less • Composition of numbers 1-3 • 2d and 3d shape through stories and topic work • Positional language <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • How do you know? • What is the same? What is different? <p>Onslow:</p> <ul style="list-style-type: none"> • Creating Diwali patterns • Introducing Numberblocks 	<p>Topic: Terrific Transport</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Addition and Subtraction (within 10) • Geometry: Shape • Number: Place Value (within 20) <p>Key Questions:</p> <ul style="list-style-type: none"> • What does this sign mean? • How can we work this out? • How could you sort these.....? <p>Onslow:</p> <ul style="list-style-type: none"> • Making jelly (measurement and capacity) • Making sandwiches (fractions) • Special helper watches – telling the time to o'clock and halfpast 	<p>Topic: Into the Dark (Guy Fawkes & Owl who was afraid of the dark)</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Addition and Subtraction • Measurement: Money • Number: Multiplication and Division <p>Key Questions:</p> <ul style="list-style-type: none"> • What does this sign mean? • How can this pattern help you find an answer? • What do think comes next? Why? <p>Onslow:</p> <ul style="list-style-type: none"> • Beebots (positional and directional language)

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<p>Spring 1</p>	<p>Topic: Once upon a time</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Introducing 0 • Composition of numbers 4 and 5 • Representing and comparing and numbers 1-8 • Making pairs and combining groups • Weighing and comparing <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • How do you know? • What do think comes next? Why? • What is the same? What is different? <p>Onslow:</p> <ul style="list-style-type: none"> • Making gingerbread men • NSPCC Number Day 	<p>Topic: Our wonderful world: Wintery Wonderlands</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Addition and Subtraction (within 20) • Number: Place Value (within 50) <p>Key Questions:</p> <ul style="list-style-type: none"> • What do think comes next? Why? • How can this pattern help you find an answer? • What can you use to help you? <p>Onslow:</p> <ul style="list-style-type: none"> • NSPCC Number Day • WOW day Experiment: how long does it take for ice to melt? (Time, statistics) • Large scale animal pictogram • Special helper watches – telling the time to o'clock and half past 	<p>Topic: Explorers</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Multiplication and Division • Statistics <p>Key Questions:</p> <ul style="list-style-type: none"> • How can this pattern help you find an answer? What do think comes next? Why? • Is there a way to record what you've found that might help us see more patterns? • Are everybody's results the same? Why/why not? Have you thought of another way this could be done? Do you think we have found the best solution? <p>Onslow:</p> <ul style="list-style-type: none"> • NSPCC Number Day • Map work (positional and directional language)
<p>Spring 2</p>	<p>Topic: Once upon a time</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Comparing numbers to 10 • Number bonds to 10 • 3d shape and pattern • Measuring distance and problem solving <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • How do you know? • What is the same? What is different? <p>Onslow:</p> <ul style="list-style-type: none"> • Introducing Professor Plus and Eddie Equals 	<p>Topic: Our wonderful world: Sizzling Equators</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Measurement: Length and Height • Measurement: Weight and Volume • Number: Consolidation <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to measure..... ? • How do you know? • Are there other possibilities? • How can we work out the correct answer? <p>Onslow:</p> <ul style="list-style-type: none"> • Large scale animal pictogram • Special helper watches – telling the time to o'clock and half past, quarter past 	<p>Topic: Explorers</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Geometry: Properties of Shape • Number: Fractions <p>Key Questions:</p> <ul style="list-style-type: none"> • How could you sort these.....? • How do you know? • What could we use to help? • How did you find that out? <p>Onslow:</p> <ul style="list-style-type: none"> • Explorer WOW day: treasure hunt and maps (positional and directional language)

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<p>Summer 1</p>	<p>Topic: Our World</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Building numbers and counting patterns beyond 10 • Addition and subtraction • Height and Length <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • What does this sign mean? • Can you see a pattern? <p>Onslow:</p> <ul style="list-style-type: none"> • Introducing Miss Minus • 'What the Ladybird Heard' maps (Positional and directional language) • 'Spinderella' problem solving • Measuring height of plants and length of worms (Woodland Schools) 	<p>Topic: Castles</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Multiplication and Division • Number: Fractions • Geometry: Position and Direction <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make... ? • Have we found all the possibilities? • How did you find that out? <p>Onslow:</p> <ul style="list-style-type: none"> • Sequencing events from trip to Arundel castle • Castle game: how to keep your castle secure. (money) • Special helper watches – telling the time to o'clock and half past, quarter past 	<p>Topic: Tales from other cultures</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Measurement: length and height • Geometry: Position and Direction • Number: Consolidation and Problem Solving <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to measure..... ? • How can this pattern help you find an answer? - What do think comes next? Why? • Are everybody's results the same? Why/why not? <p>Onslow:</p> <ul style="list-style-type: none"> • Little Red Riding Hood WOW day – following instructions and giving directions
<p>Summer 2</p>	<p>Topic: Our World</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Doubling, sharing and grouping • Odd and even numbers • Addition and subtraction (recording) • Patterns and relationships • 2d and 3d shape vocabulary <p>Key Questions:</p> <ul style="list-style-type: none"> • How many ways can you find to make ? • What does this sign mean? • How could you sort these.....? • Can you see a pattern? <p>Onslow:</p> <ul style="list-style-type: none"> • Beach shop or ice cream parlour (money) • Sports day 	<p>Topic: Oh I do like to be beside the seaside</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Number: Place Value (within 100) • Measurement: Money • Measurement: Time <p>Key Questions:</p> <ul style="list-style-type: none"> • How could you sort these.....? • Can you see a pattern? • How can this pattern help you find an answer? • What do think comes next? Why? • Is there a way to record what you've found that might help us see more patterns? <p>Onslow:</p> <ul style="list-style-type: none"> • Sports day / ordinal numbers • Sand models (3d shape) • Paying for ice creams (money) • Special helper watches – telling the time to o'clock and half past, quarter past, a quarter to 	<p>Topic: Tales from other cultures</p> <p>Curriculum:</p> <ul style="list-style-type: none"> • Measurement: time • Measurement: Mass, Capacity and Temperature • Number: Consolidation <p>Key Questions:</p> <ul style="list-style-type: none"> • Are everybody's answers the same? Why/why not? <p>Onslow:</p> <ul style="list-style-type: none"> • Making rainbow wraps (measurement) • Sports day

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Additional e.g. clubs, wow weeks, visitors, whole school events etc.	<ul style="list-style-type: none">• Marble in the jar' reward system in Year 1, recorded on tens frames• Self-registration chart, recorded on tens frames• Children accessing continuous provision room in Year 2 recorded on chart• Date and weather chart daily• 'Your Trak' – how many laps have children completed? Who is the winning class?• Voting for your favourite book (duplo voting towers)• Maths Magician from each class chosen weekly• Bikes and scooters – allocated parking spaces, numbered bikes. Stop watches to time children and see if they can beat their score.• Visual timetables and date displays• Birthday displays• STEM week every 3 years• Maths in continuous provision inside and outside• Maths in Woodland Schools (measuring temperature, looking at patterns of season and weather, measuring distance and length)
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