

Maths Curriculum Overview



This Curriculum Overview shows what your child will learn in Maths during their time at The Free School Norwich. This is reviewed annually and may be adapted to meet the needs of individual children or classes, and where appropriate, will be linked to events or places in our local environment.

Year 1 Maths					
Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1- Place Value within 10	Block 2 - Addition and Subtraction	Block 4: Place Value within 20	Block 6: Place Value within 50	Block 9: Multiplication and Division	Block 12: Place Value within 100
Sequence: 1. sort objects 2. Count objects 3. Count objects from a larger group 4. Represent objects 5. Recognise numbers as words 6. Count on from any number 7. 1 more 8. Count backwards within 10 9. 1 less 10. Compare groups by matching 11. Fewer, more, same 12. Less than, greater than, equal to	Sequence: 1. Introduce parts and wholes 2. Part-whole model 3. Write number sentences 4. Fact families – addition facts 5. Number bonds within 10 6. Systematic number bonds within 10 7. Number bonds to 10 8. Addition – add together 9. Addition – add more 10. Addition problems 11. Find a part 12. Subtraction – find a part	Sequence: 1. Count within 20 2. Understand 10 3. Understand 11, 12 and 13 4. Understand 14, 15 and 16 5. Understand 17, 18 and 19 6. Understand 20 7. 1 more and 1 less 8. The number line to 20 9. Use a number line to 20 10. Estimate on a number line to 20 11. Compare numbers to 20 12. Order numbers to 20	Sequence: 1. Count from 20 to 50 2. 20, 30, 40 and 50 3. Count by making groups of tens 4. Groups of tens and ones 5. Partition into tens and ones 6. The number line to 50 7. Estimate on a number line to 50 8. 1 more, 1 less Vocabulary: Sort, represent, multiples, partitioning, ones, tens	Sequence: 1. Count in 2s 2. Count in 10s 3. Count in 5s 4. Recognise equal groups 5. Add equal groups 6. Make arrays 7. Make doubles 8. Make equal groups – grouping 9. Make equal groups – sharing Vocabulary: Multiplication, division, arrays	Sequence: 1. Count from 50 to 100 2. Tens to 100 3. Partition into tens and ones 4. The number line to 100 5. 1 more, 1 less 6. Compare numbers with the same number of tens 7. Compare any two numbers Vocabulary: Sort, represent, multiples, partitioning, ones, tens, hundreds

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<p>Vocabulary: Sort, represent, multiples, partitioning, ones, tens</p>	<p>13. Fact families – the eight facts 14. Subtraction – take away/cross out (How many left?) 15. Take away (How many left?) 16. Subtraction on a number line</p> <p>Vocabulary: Addition/ add, subtraction, difference, equals, facts, problems, missing number problems, 2-digit number, inverse</p>	<p>Vocabulary: Sort, represent, multiples, partitioning, ones, tens</p>			
	<p>Block 3: Shape</p>	<p>Block 5: Addition and Subtraction within 20</p>	<p>Block 7: Length and Height</p>	<p>Block 10: Fractions</p>	<p>Block 13: Money</p>
	<p>Sequence 1. Recognise and name 3-D shapes 2. Sort 3-D shapes 3. Recognise and name 2-D shapes 4. Sort 2-D shapes 5. Patterns with 2-D and 3-D shapes</p> <p>Vocabulary:</p>	<p>Sequence 1. Add by counting on within 20 2. Add ones using number bonds 3. Find and make number bonds to 20 4. Doubles 5. Near doubles 6. Subtract ones using number bonds 7. Subtraction – counting back</p>	<p>Sequence: 1. Compare lengths and heights 2. Measure length using objects 3. Measure length in centimetres</p> <p>Vocabulary: Compare</p>	<p>Sequence: 1. Recognise a half of an object or a shape 2. Find a half of an object or a shape 3. Recognise a half of a quantity 4. Find a half of a quantity 5. Recognise a quarter of an object or a shape 6. Find a quarter of an object or a shape</p>	<p>Sequence: 1. Unitising 2. Recognise coins 3. Recognise notes 4. Count in coins</p> <p>Vocabulary: Money, coins, notes, pounds, pence</p>

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	Sides, corners, properties, pyramids, faces	8. Subtraction – finding the difference 9. Related facts 10. Missing number problems Vocabulary: Addition/ add, subtraction, difference, equals, facts, problems, missing number problems, 2-digit number, inverse		7. Recognise a quarter of a quantity 8. Find a quarter of a quantity Vocabulary: Whole, half, quarter, equal parts	
			Block 8: Mass and Volume	Block 11: Position and Direction	Block 14: Time
			Sequence: 1. Heavier and lighter 2. Measure mass 3. Compare mass 4. Full and empty 5. Compare volume 6. Measure capacity 7. Compare capacity Vocabulary: Mass, volume	Sequence: 1. Describe turns 2. Describe position – left and right 3. Describe position – forwards and backwards 4. Describe position – above and below 5. Ordinal numbers Vocabulary: Position, direction, movement, whole turn, quarter turn, half turn, three-quarter turn	Sequence: 1. Before and after 2. Days of the week 3. Months of the year 4. Hours, minutes and seconds 5. Tell the time to the hour 6. Tell the time to the half hour Vocabulary: Chronological order, days of the week, months of the year,

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					month, year, o'clock, half past, second
National Curriculum Links:					
Science					
<ul style="list-style-type: none">gathering and recording data to help in answering questions.					
Computing					
<ul style="list-style-type: none">understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions					
History					
<ul style="list-style-type: none">know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day					
Geography					
<ul style="list-style-type: none">collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processesuse simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map					
Music					
<ul style="list-style-type: none">understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations.					
Design and Technology					
<ul style="list-style-type: none">generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology					

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Year 2 Maths					
Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1: Place Value	Block 2 (cont): Addition and Subtraction	Block 4: Money	Block 5: (cont) Multiplication and Division	Block 8: Fractions	Block 10: Statistics
<p>Sequence:</p> <ol style="list-style-type: none"> Numbers to 20 Count objects to 100 by making 10s Recognise tens and ones Use a place value chart Partition numbers to 100 Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in expanded form 10s on the number line to 100 10s and 1s on the number line to 100 Estimate numbers on a number line Compare objects Compare numbers 	<p>Sequence:</p> <ol style="list-style-type: none"> Subtract two 2-digit numbers (not across a 10) Subtract two 2-digit numbers (across a 10) Mixed addition and subtraction Compare number sentences Missing number problems <p>Vocabulary: Sum, three-digit number, commutative</p>	<p>Sequence:</p> <ol style="list-style-type: none"> Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money Make a pound Small steps Find change Two-step problems <p>Vocabulary: Value, change</p>	<p>Sequence:</p> <ol style="list-style-type: none"> Doubling and halving numbers Odd and even numbers The 10 times-table Divide by 10 Step The 5 times-table Step Divide by 5 Small steps The 5 and 10 times-tables <p>Vocabulary: Multiplication tables, commutative, repeated addition</p>	<p>Sequence:</p> <ol style="list-style-type: none"> Introduction to parts and whole Equal and unequal parts Recognise a half Find a half Recognise a quarter Find a quarter Recognise a third Find a third Find the whole Unit fractions Non-unit fractions Recognise the equivalence of a half and two-quarters Recognise three-quarters Find three-quarters Count in fractions up to a whole 	<p>Sequence:</p> <ol style="list-style-type: none"> Make tally charts Tables Block diagrams Draw pictograms (1–1) Interpret pictograms (1–1) Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10) <p>Vocabulary: Pictograms, tally chart, block diagram, category, sorting, totalling, comparing, horizontal, vertical</p>

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<p>14. Order objects and numbers 15. Count in 2s, 5s and 10s 16. Count in 3s</p> <p>Vocabulary: Count in steps, count in multiples, place value, estimate, compare</p>				<p>Vocabulary: Three quarters, third, equivalent fractions, unit fractions, non-unit fractions, numerator, denominator, one whole</p>	
<p>Block 2: Addition and Subtraction</p>	<p>Block 3: Shape</p>	<p>Block 5: Multiplication and Division</p>	<p>Block 6: Length and Height</p>	<p>Block 9: Time</p>	<p>Block 11: Position and Direction</p>
<p>Sequence: 1. Bonds to 10 2. Fact families - addition and subtraction bonds within 20 3. Related facts 4. Bonds to 100 (tens) 5. Add and subtract 1s 6. Add by making 10 7. Add three 1-digit numbers 8. Add to the next 10 9. Add across a 10 10. Subtract across 10 11. Subtract from a 10 12. Subtract a 1-digit number from a 2-digit number (across a 10)</p>	<p>Sequence: 1. Recognise 2-D and 3-D shapes 2. Count sides on 2-D shapes 3. Count vertices on 2-D shapes 4. Draw 2-D shapes Step 5. Lines of symmetry on shapes 6. Use lines of symmetry to complete shapes 7. Sort 2-D shapes 8. Count faces on 3-D shapes 9. Count edges on 3-D shapes 10. Count vertices on 3-D shapes</p>	<p>Sequence: 1. Recognise equal groups 2. Make equal groups 3. Add equal groups 4. Introduce the multiplication symbol 5. Multiplication sentences 6. Use arrays 7. Make equal groups – grouping 8. Make equal groups – sharing 9. The 2 times-table Step 10. Divide by 2</p>	<p>Sequence: 1. Measure in centimetres 2. Measure in metres 3. Compare lengths and heights 4. Order lengths and heights 5. Four operations with lengths and heights</p> <p>Vocabulary: Standard units, estimate, order, record results, centimetre (cm), metre (m)</p>	<p>Sequence: 1. O'clock and half past 2. Quarter past and quarter to 3. Tell the time past the hour 4. Tell the time to the hour 5. Tell the time to 5 minutes 6. Minutes in an hour 7. Hours in a day</p> <p>Vocabulary: Intervals of time, quarter to/past, duration</p>	<p>Sequence: 1. Language of position 2. Describe movement 3. Describe turns 4. Describe movement and turns 5. Shape patterns with turns</p> <p>Vocabulary: Clockwise/ anti-clockwise, straight line, rotation, arrange, sequences</p>

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<p>13. 10 more, 10 less Step 14. Add and subtract 10s 15. Add two 2-digit numbers (not across a 10) 16. Add two 2-digit numbers (across a 10)</p> <p>Vocabulary: Sum, three-digit number, commutative</p>	<p>11. Sort 3-D shapes 12. Make patterns with 2-D and 3-D shapes</p> <p>Vocabulary: Pentagon, hexagon, line of symmetry, properties, cylinder, edges, vertices, vertex</p>	<p>Vocabulary: Multiplication tables, commutative, repeated addition</p>			
			<p>Block 7: Mass, Capacity and Temperature</p>		
			<p>Sequence:</p> <ol style="list-style-type: none"> 1. Compare mass 2. Measure in grams 3. Measure in kilograms 4. Four operations with mass 5. Compare volume and capacity 6. Measure in millilitres 7. Measure in litres 8. Four operations with volume and capacity 9. Temperature <p>Vocabulary: Kilogram (kg), gram (g), quarter full, three quarters full, litres (l),</p>		

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			millilitres (ml), temperature, Celsius millilitres (ml), temperature, Celsius		
<p>National Curriculum Links:</p> <p>Science</p> <ul style="list-style-type: none"> gathering and recording data to help in answering questions. <p>Computing</p> <ul style="list-style-type: none"> understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions <p>History</p> <ul style="list-style-type: none"> know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: <p>Geography</p> <ul style="list-style-type: none"> collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map <p>Music</p> <ul style="list-style-type: none"> understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations. <p>Design and Technology</p> <ul style="list-style-type: none"> generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 					

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Year 3 Maths					
Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1: Place Value	Block 2 (cont): Addition and Subtraction	Block 4: Multiplication and Division	Block 6: Fractions	Block 8: Fractions	Block 10 (cont): Time
<p>Sequence:</p> <ol style="list-style-type: none"> 1. Represent numbers to 100 2. Partition numbers to 100 3. Number line to 100 4. Hundreds 5. Represent numbers to 1,000 6. Partition numbers to 1,000 7. Flexible partitioning of numbers to 1,000 8. Hundreds, tens and ones 9. Find 1, 10 or 100 more or less 10. Number line to 1,000 11. Estimate on a number line to 1,000 12. Compare numbers to 1,000 13. Order numbers to 1,000 14. Count in 50s 	<p>Sequence:</p> <ol style="list-style-type: none"> 15. Subtract two numbers (across a 10) 16. Subtract two numbers (across a 100) 17. Add 2-digit and 3-digit numbers 18. Subtract a 2-digit number from a 3-digit number 19. Complements to 100 20. Estimate answers 21. Inverse operations 22. Make decisions <p>Vocabulary: Column addition, column subtraction, exchange, estimate</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Multiples of 10 2. Related calculations 3. Reasoning about multiplication 4. Multiply a 2-digit number by a 1-digit number – no exchange 5. Multiply a 2-digit number by a 1-digit number – with exchange 6. Link multiplication and division 7. Divide a 2-digit number by a 1-digit number – no exchange 8. Divide a 2-digit number by a 1-digit number – flexible partitioning 9. Divide a 2-digit number by a 1-digit number – with remainders 10. Scaling 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Understand the denominators of unit fractions 2. Compare and order unit fractions 3. Understand the numerators of non-unit fractions 4. Understand the whole non-unit fractions 5. Compare and order non-unit fractions 6. Fractions and scales 7. Fractions on a number line 8. Count in fractions on a number line 9. Equivalent fractions on a number line 10. Equivalent fractions as bar models <p>Vocabulary: Tenths</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Add fractions 2. Subtract fractions 3. Partition the whole 4. Unit fractions of a set of objects 5. Non-unit fractions of a set of objects 6. Reasoning with fractions of an amount <p>Vocabulary: Tenths</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 8. Hours and minutes – use start and end times 9. Hours and minutes - use durations 10. Minutes and seconds 11. Units of time 12. Solve problems with time <p>Vocabulary: Hours, minutes, seconds, duration</p>

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<p>Vocabulary: Ascending, descending, 10 or 100 more, 10 or 100 less, hundreds</p>		<p>11. How many ways?</p> <p>Vocabulary: Exchange, mathematical statements, missing number problems, integer scaling problems, correspondence problems, derived facts</p>			
<p>Block 2: Addition and Subtraction</p>	<p>Block 3: Multiplication and Division</p>	<p>Block 5: Length and Perimeter</p>	<p>Block 7: Mass and Capacity</p>	<p>Block 9: Money</p>	<p>Block 11: Shape</p>
<p>Sequence: 1. Apply number bonds within 10 2. Add and subtract 1s 3. Add and subtract 10s 4. Add and subtract 100s 5. Spot the pattern 6. Add 1s across a 10 7. Add 10s across a 100 8. Subtract 1s across a 10 9. Subtract 10s across a 100 10. Make connections 11. Add two numbers (no exchange) 12. Subtract two numbers (no exchange) 13. Add two numbers (across a 10)</p>	<p>Sequence: 1. Multiplication – equal groups 2. Use arrays 3. Multiples of 2 4. Multiples of 5 and 10 5. Sharing and grouping 6. Multiply by 3 7. Divide by 3 8. The 3 times-table 9. Multiply by 4 10. Divide by 4 11. The 4 times-table 12. Multiply by 8 13. Divide by 8 14. The 8 times-table 15. The 2, 4 and 8 times-tables</p>	<p>Sequence: 1. Measure in metres and centimetres 2. Measure in millimetres 3. Measure in centimetres and millimetres 4. Metres, centimetres and millimetres 5. Equivalent lengths (metres and centimetres) 6. Equivalent lengths (centimetres and millimetres) 7. Compare lengths 8. Add lengths 9. Subtract lengths</p>	<p>Sequence: 1. Use scales 2. Measure mass in grams 3. Measure mass in kilograms and grams 4. Equivalent masses (kilograms and grams) 5. Compare mass 6. Add and subtract mass 7. Measure capacity and volume in millilitres 8. Measure capacity and volume in litres and millilitres 9. Equivalent capacities and volumes (litres and millilitres) 10. Compare capacity and volume</p>	<p>Sequence: 1. Pounds and pence 2. Convert pounds and pence 3. Add money 4. Subtract money 5. Find change Vocabulary: Pounds, pence, convert, change</p>	<p>Sequence: 1. Turns and angles 2. Right angles 3. Compare angles 4. Measure and draw accurately 5. Horizontal and vertical 6. Parallel and perpendicular 7. Recognise and describe 2-D shapes 8. Draw polygons 9. Recognise and describe 3-D shapes 10. Make 3-D shapes</p>

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<p>14. Add two numbers (across a 100)</p> <p>Vocabulary: Column addition, column subtraction, exchange, estimate</p>	<p>Vocabulary: Exchange, mathematical statements, missing number problems, integer scaling problems, correspondence problems, derived facts</p>	<p>10. What is perimeter? 11. Measure perimeter 12. Calculate perimeter</p> <p>Vocabulary: Millimetre (mm), perimeter</p>	<p>11. Add and subtract capacity and volume</p> <p>Vocabulary: Kilogram, gram, mass, volume, millilitres, litres, capacity</p>		<p>Vocabulary: Right-angle triangle, heptagon, octagon, polygon, properties, prism Orientations, angles, acute, obtuse, horizontal, vertical, perpendicular, parallel</p>
				Block 10: Time	Block 12: Statistics
				<p>Sequence:</p> <ol style="list-style-type: none"> 1. Roman numerals to 12 2. Tell the time to 5 minutes 3. Tell the time to the minute 4. Read time on a digital clock 5. Use am and pm 6. Years, months and days 7. Days and hours <p>Vocabulary: Analogue clock, roman numerals, 12 hour clock, 24 hour clock, am/pm,</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Interpret pictograms 2. Draw pictograms 3. Interpret bar charts 4. Draw bar charts 5. Collect and represent data 6. Two-way tables <p>Vocabulary: Table, bar chart, one-step problem, two-step problem</p>

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				noon, midnight, leap year, digital	
National Curriculum Links:					
Science					
<ul style="list-style-type: none">• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions					
Computing					
<ul style="list-style-type: none">• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts• use sequence, selection, and repetition in programs; work with variables and various forms of input and output• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs					
History					
<ul style="list-style-type: none">• continue to develop a chronologically secure knowledge and understanding of British, local and world history					
Geography					
<ul style="list-style-type: none">• collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes• use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world• use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.					
Music					
<ul style="list-style-type: none">• understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations.					
Design and Technology					
<ul style="list-style-type: none">• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design					

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Year 4 Maths

Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1: Place Value	Block 2 (cont): Addition and Subtraction	Block 5: Multiplication and Division	Block 7: Fractions	Block 9: Decimals	Block 11: Shape
<p>Sequence:</p> <ol style="list-style-type: none"> 1. Represent numbers to 1,000 2. Partition numbers to 1,000 3. Number line to 1,000 4. Thousands 5. Represent numbers to 10,000 6. Partition numbers to 10,000 7. Flexible partitioning of numbers to 10,000 8. Find 1, 10, 100, 1,000 more or less 9. Number line to 10,000 10. Estimate on a number line to 10,000 11. Compare numbers to 10,000 12. Order numbers to 10,000 13. Roman numerals 14. Round to the nearest 10 15. Round to the nearest 	<p>Sequence:</p> <ol style="list-style-type: none"> 8. Efficient subtraction 9. Estimate answers 10. Checking strategies <p>Vocabulary:</p> <p>4-digit number, operations, methods</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Factor pairs 2. Use factor pairs 3. Multiply by 10 4. Multiply by 100 5. Divide by 10 6. Divide by 100 7. Related facts – multiplication and division 8. Informal written methods for multiplication 9. Multiply a 2-digit number by a 1-digit number 10. Multiply a 3-digit number by a 1-digit number 11. Divide a 2-digit number by a 1-digit number (1) 12. Divide a 2-digit number by a 1-digit number (2) 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Understand the whole 2. Count beyond 1 3. Partition a mixed number 4. Number lines with mixed numbers 5. Compare and order mixed numbers 6. Understand improper fractions 7. Convert mixed numbers to improper fractions 8. Convert improper fractions to mixed numbers 9. Equivalent fractions on a number line 10. Equivalent fraction families 11. Add two or more fractions 12. Add fractions and mixed numbers 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Make a whole with tenths 2. Make a whole with hundredths 3. Partition decimals 4. Flexibly partition decimals 5. Compare decimals 6. Order decimals 7. Round to the nearest whole number 8. Halves and quarters as decimals <p>Vocabulary:</p> <p>Decimal equivalence, hundredths, convert, proper fractions, improper fractions, decimal point</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Understand angles as turns 2. Identify angles 3. Compare and order angles 4. Triangles 5. Quadrilaterals 6. Polygons 7. Lines of symmetry 8. Complete a symmetric figure <p>Vocabulary:</p> <p>Isosceles, equilateral, scalene, trapezium, rhombus, parallelogram, kite, geometric shapes, quadrilaterals</p>

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<p>100 16. Round to the nearest 1,000 17. Round to the nearest 10, 100 or 1,000</p> <p>Vocabulary: Negative numbers, Roman numerals, 1000 more, 1000 less, thousands, round</p>		<p>13. Divide a 3-digit number by a 1-digit number 14. Correspondence problems 15. Efficient multiplication</p> <p>Vocabulary: Factor pairs, formal written layout, distributive law, remainders</p>	<p>13. Subtract two fractions 14. Subtract from whole amounts 15. Subtract from mixed numbers</p> <p>Vocabulary: Decimal equivalence, hundredths, convert, proper fractions, improper fractions, decimal point</p>		
Block 2: Addition and Subtraction	Block 3: Area	Block 6: Length and Perimeter	Block 8: Decimals	Block 10: Money	Block 12: Statistics
<p>Sequence: 1. Add and subtract 1s, 10s, 100s and 1,000s 2. Add up to two 4-digit numbers – no exchange 3. Add two 4-digit numbers – one exchange 4. Add two 4-digit numbers – more than one exchange 5. Subtract two 4-digit numbers – no exchange 6. Subtract two 4-digit numbers – one exchange 7. Subtract two 4-digit numbers – more than</p>	<p>Sequence: 1. What is area? 2. Count squares 3. Make shapes 4. Compare areas</p> <p>Vocabulary: Area, square</p>	<p>Sequence: 1. Measure in kilometres and metres 2. Equivalent lengths (kilometres and metres) 3. Perimeter on a grid 4. Perimeter of a rectangle 5. Perimeter of rectilinear shapes 6. Find missing lengths in rectilinear shapes 7. Calculate perimeter of rectilinear shapes 8. Perimeter of regular polygons</p>	<p>Sequence: 1. Tenths as fractions 2. Tenths as decimals 3. Tenths on a place value chart 4. Tenths on a number line 5. Divide a 1-digit number by 10 6. Divide a 2-digit number by 10 7. Hundredths as fractions 8. Hundredths as decimals 9. Hundredths on a place</p>	<p>Sequence: 1. Write money using decimals 2. Convert between pounds and pence 3. Compare amounts of money 4. Estimate with money 5. Calculate with money 6. Solve problems with money</p> <p>Vocabulary: Decimals, estimate</p>	<p>Sequence: 1. Interpret charts 2. Comparison, sum and difference 3. Interpret line graphs 4. Draw line graphs</p> <p>Vocabulary: Time graph, discrete data, continuous data, line graph, comparison problem, sum problem, difference problem, calculate, interpret</p>

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<p>one exchange</p> <p>Vocabulary: 4-digit number, operations, methods</p>		<p>9. Perimeter of polygons</p> <p>Vocabulary: Kilometres, rectilinear figure, area</p>	<p>value chart</p> <p>10. Divide a 1- or 2-digit number by 100</p> <p>Vocabulary: Decimal equivalence, hundredths, convert, proper fractions, improper fractions, decimal point</p>		
	Block 4: Multiplication and Division				Block 13: Position and Direction
	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Multiples of 3 2. Multiply and divide by 6 3. 6 times-table and division facts 4. Multiply and divide by 9 5. 9 times-table and division facts 6. The 3, 6 and 9 times-tables 7. Multiply and divide by 7 8. 7 times-table and division facts 9. 11 times-table and division facts 10. 12 times-table and 				<p>Sequence:</p> <ol style="list-style-type: none"> 1. Describe position using coordinates 2. Plot coordinates 3. Draw 2-D shapes on a grid 4. Translate on a grid 5. Describe translation on a grid <p>Vocabulary: Co-ordinates, first quadrant, grid, translation, plot, polygon, axis</p>

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	<p>division facts 11. Multiply by 1 and 0 12. Divide a number by 1 and itself 13. Multiply three numbers</p> <p>Vocabulary: Factor pairs, formal written layout, distributive law, remainders</p>				
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National Curriculum Links

Science

- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Computing

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

History

- continue to develop a chronologically secure knowledge and understanding of British, local and world history

Geography

- collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes

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- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Music

- understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations.

Design and Technology

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

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Year 5 Maths					
Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1: Place Value	Block 3: Multiplication and Division	Block 5: Multiplication and Division	Block 7: Decimals and Percentages	Block 10: Shape	Block 13: Negative Numbers
<p>Sequence:</p> <ol style="list-style-type: none"> 1. Roman numerals to 1,000 2. Numbers to 10,000 3. Numbers to 100,000 4. Numbers to 1,000,000 5. Read and write numbers to 1,000,000 6. Powers of 10 7. 10/100/1,000/10,000/100,000 more or less 8. Partition numbers to 1,000,000 9. Number line to 1,000,000 10. Compare and order numbers to 100,000 11. Compare and order numbers to 1,000,000 12. Round to the nearest 10, 100 or 1,000 13. Round within 100,000 14. Round within 1,000,000 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Multiples 2. Common multiples 3. Factors 4. Common factors 5. Prime numbers 6. Square numbers 7. Cube numbers 8. Multiply by 10, 100 and 1,000 9. Divide by 10, 100 and 1,000 10. Multiples of 10, 100 and 1,000 <p>Vocabulary: Multiples, factors, prime numbers, square numbers, cube numbers, short division, product, dividend, divisor, quotient, operations</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Multiply up to a 4-digit number by a 1-digit number 2. Multiply a 2-digit number by a 2-digit number (area model) 3. Multiply a 2-digit number by a 2-digit number 4. Multiply a 3-digit number by a 2-digit number 5. Multiply a 4-digit number by a 2-digit number 6. Solve problems with multiplication 7. Short division 8. Divide a 4-digit number by a 1-digit number 9. Divide with remainders 10. Efficient division 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Decimals up to 2 decimal places 2. Equivalent fractions and decimals (tenths) 3. Equivalent fractions and decimals (hundredths) 4. Equivalent fractions and decimals 5. Thousandths as fractions 6. Thousandths as decimals 7. Thousandths on a place value chart 8. Order and compare decimals (same number of decimal places) 9. Order and compare any decimals with up to 3 decimal places 10. Round to the nearest whole number 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Understand and use degrees 2. Classify angles 3. Estimate angles 4. Measure angles up to 180° 5. Draw lines and angles accurately 6. Calculate angles around a point 7. Calculate angles on a straight line 8. Lengths and angles in shapes 9. Regular and irregular polygons 10 3-D shapes <p>Vocabulary: Regular polygon, irregular polygon, reflex angles, degrees, angles on a straight line, angles</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Understand negative numbers 2. Count through zero in 1s 3. Count through zero in multiples 4. Compare and order negative numbers 5. Find the difference <p>Vocabulary: Negative number</p>

Maths Curriculum Overview



<p>Vocabulary: Ten thousands, one hundred thousands, powers of, integer</p>		<p>11. Solve problems with multiplication and division</p> <p>Vocabulary: Multiples, factors, prime numbers, square numbers, cube numbers, short division, product, dividend, divisor, quotient, operations</p>	<p>11. Round to 1 decimal place 12. Understand percentages 13. Percentages as fractions 14. Percentages as decimals 15. Equivalent fractions, decimals and percentages</p> <p>Vocabulary: Fifth, thousandths, mixed numbers, per cent, factors, integer, complements</p>	<p>round a point, vertically opposite, missing angles</p>	
<p>Block 2: Addition and Subtraction</p>	<p>Block 4: Fractions</p>	<p>Block 6: Fractions</p>	<p>Block 8: Perimeter and Area</p>	<p>Block 11: Position and Direction</p>	<p>Block 14: Converting Units</p>
<p>Sequence: 1. Mental strategies 2. Add whole numbers with more than four digits 3. Subtract whole numbers with more than four digits 4. Round to check answers</p>	<p>Sequence: 1. Find fractions equivalent to a unit fraction 2. Find fractions equivalent to a non-unit fraction 3. Recognise equivalent fractions 4. Convert improper fractions to mixed numbers</p>	<p>Sequence: 1. Multiply a unit fraction by an integer 2. Multiply a non-unit fraction by an integer 3. Multiply a mixed number by an integer 4. Calculate a fraction of a quantity 5. Fraction of an amount 6. Find the whole</p>	<p>Sequence: 1. Perimeter of rectangles 2. Perimeter of rectilinear shapes 3. Perimeter of polygons 4. Area of rectangles 5. Area of compound shapes 6. Estimate area</p>	<p>Sequence: 1. Read and plot coordinates 2. Problem solving with coordinates 3. Translation 4. Translation with coordinates 5. Lines of symmetry 6. Reflection in horizontal and vertical lines</p>	<p>Sequence: 1. Kilograms and kilometres 2. Millimetres and millilitres 3. Convert units of length 4. Convert between metric and imperial units 5. Convert units of time 6. Calculate with timetables</p>

Maths Curriculum Overview



<p>5. Inverse operations (addition and subtraction)</p> <p>6. Multi-step addition and subtraction problems</p> <p>7. Compare calculations</p> <p>8. Find missing numbers</p> <p>Vocabulary: Inverse operations, multi-step operations</p>	<p>5. Convert mixed numbers to improper fractions</p> <p>6. Compare fractions less than 1</p> <p>7. Order fractions less than 1</p> <p>8. Compare and order fractions greater than 1</p> <p>9. Add and subtract fractions with the same denominator</p> <p>10. Add fractions within 1</p> <p>11. Add fractions with total greater than 1</p> <p>12. Add to a mixed number</p> <p>13. Add two mixed numbers</p> <p>14. Subtract fractions</p> <p>15. Subtract from a mixed number</p> <p>16. Subtract from a mixed number – breaking the whole</p> <p>17. Subtract two mixed numbers</p> <p>Vocabulary: Fifth, thousandths, mixed numbers, per</p>	<p>7. Use fractions as operators</p> <p>Vocabulary: Fifth, thousandths, mixed numbers, per cent, factors, integer, complements</p>	<p>Vocabulary: Decimal notation, scaling, metric units, imperial units, inches, compound shape, irregular shapes, square centimetres, square metres</p>	<p>Vocabulary: reflection</p>	<p>Vocabulary: Cubic centimetre, pounds, pints</p>
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Maths Curriculum Overview



	cent, factors, integer, complements				
			Block 9: Statistics	Block 12: Decimals	Block 15: Volume
			<p>Sequence:</p> <ol style="list-style-type: none"> 1. Draw line graphs 2. Read and interpret line graphs 3. Read and interpret tables 4. Two-way tables 5. Read and interpret timetables <p>Vocabulary: Timetable, two-way timetable</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Use known facts to add and subtract decimals within 1 2. Complements to 1 3. Add and subtract decimals across 1 4. Add decimals with the same number of decimal places 5. Subtract decimals with the same number of decimal places 6. Add decimals with different numbers of decimal places 7. Subtract decimals with different numbers of decimal places 8. Efficient strategies for adding and subtracting decimals 9. Decimal sequences 10. Multiply by 10, 100 and 1,000 11. Divide by 10, 100 and 1,000 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Cubic centimetres 2. Compare volume 3. Estimate volume 4. Estimate capacity <p>Vocabulary: Cubic centimetres, pint</p>

Maths Curriculum Overview



				<p>12. Multiply and divide decimals – missing values</p> <p>Vocabulary: Fifth, thousandths, mixed numbers, per cent, factors, integer, complements</p>	
<p>National Curriculum Links</p> <p>Science</p> <ul style="list-style-type: none"> taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations <p>Computing</p> <ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>History</p> <ul style="list-style-type: none"> continue to develop a chronologically secure knowledge and understanding of British, local and world history <p>Geography</p> <ul style="list-style-type: none"> collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes. use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies <p>Music</p> <ul style="list-style-type: none"> understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations. 					

Maths Curriculum Overview



Design and Technology

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Maths Curriculum Overview



Year 6 Maths					
Harvest	Christmas	Winter	Spring	Whitsun	Summer
Block 1: Place Value	Block 3: Fractions	Block 6: Ratio	Block 9: Fractions, Decimals and Percentages	Block 12: Shape	Themed Projects and real life experience
<p>Sequence:</p> <ol style="list-style-type: none"> 1. Numbers to 1,000,000 2. Numbers to 10,000,000 3. Read and write numbers to 10,000,000 4. Powers of 10 5. Number line to 10,000,000 6. Compare and order any integers 7. Round any integer 8. Negative numbers <p>Vocabulary: Millions, ten millions</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Equivalent fractions and simplifying 2. Equivalent fractions on a number line 3. Compare and order (denominator) 4. Compare and order (numerator) 5. Add and subtract simple fractions 6. Add and subtract any two fractions 7. Add mixed numbers 8. Subtract mixed numbers 9. Multi-step problems <p>Vocabulary: All previous vocabulary recapped and extended</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Add or multiply? 2. Use ratio language 3. Introduction to the ratio symbol 4. Ratio and fractions 5. Scale drawing 6. Use scale factors 7. Similar shapes 8. Ratio problems 9. Proportion problems 10. Recipes <p>Vocabulary: Relative size, missing values, integer multiplication, percentages, scale factor, unequal sharing and grouping</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Decimal and fraction equivalents 2. Fractions as division 3. Understand percentages 4. Fractions to percentages 5. Equivalent fractions, decimals and percentages 6. Order fractions, decimals and percentages 7. Percentage of an amount – one step 8. Percentage of an amount – multi-step 9. Percentages – missing values <p>Vocabulary: All previous vocabulary recapped and extended</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Measure and classify angles 2. Calculate angles 3. Vertically opposite angles 4. Angles in a triangle 5. Angles in a triangle – special cases 6. Angles in a triangle – missing angles 7. Angles in a quadrilateral 8. Angles in polygons 9. Circles Step 10. Draw shapes accurately 11. Nets of 3-D shapes <p>Vocabulary: Radius, diameter, circumference, dimensions</p>	

Maths Curriculum Overview



Block 2: Addition, Subtraction, Multiplication and Division	Block 4: Fractions	Block 7: Algebra	Block 10: Area, Perimeter and Volume	Block 13: Position and Direction	
<p>Sequence:</p> <ol style="list-style-type: none"> 1. Add and subtract integers 2. Common factors 3. Common multiples 4. Rules of divisibility 5. Primes to 100 6. Square and cube numbers 7. Multiply up to a 4-digit number by a 2-digit number 8. Solve problems with multiplication 9. Short division 10. Division using factors 11. Introduction to long division 12. Long division with remainders 13. Solve problems with division 14. Solve multi-step problems 15. Order of operations 16. Mental calculations and estimation 	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Multiply fractions by integers 2. Multiply fractions by fractions 3. Divide a fraction by an integer 4. Divide any fraction by an integer 5. Mixed questions with fractions 6. Fraction of an amount 7. Fraction of an amount – find the whole <p>Vocabulary:</p> <p>All previous vocabulary recapped and extended</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. 1-step function machines 2. 2-step function machines 3. Form expressions 4. Substitution 5. Formulae 6. Form equations 7. Solve 1-step equations 8. Solve 2-step equations 9. Find pairs of values 10. Solve problems with two unknowns <p>Vocabulary:</p> <p>Formulae, linear number sequences, algebraically, equation, unknowns, combinations, variables</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Shapes – same area 2. Area and perimeter 3. Area of a triangle – counting squares 4. Area of a right-angled triangle 5. Area of any triangle 6. Area of a parallelogram 7. Volume – counting cubes 8. Volume of a cuboid <p>Vocabulary:</p> <p>Cubic metre, cubic millimetre, cubic kilometre, gallons, stones, ounces</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. The first quadrant 2. Read and plot points in four quadrants 3. Solve problems with co-ordinates 4. Translations 5. Reflections <p>Vocabulary:</p> <p>Four quadrants, co-ordinate plane</p>	

Maths Curriculum Overview



<p>17 Reason from known facts</p> <p>Vocabulary: Multi-digit numbers, long division</p>					
	<p>Block 5: Converting Units</p>	<p>Block 8: Decimals</p>	<p>Block 11: Statistics</p>		
	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Metric measures 2. Convert metric measures 3. Calculate with metric measures 4. Miles and kilometres 5. Imperial measures <p>Vocabulary: Conversion, miles, formulae, feet</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Place value within 1 2. Place value – integers and decimals 3. Round decimals 4. Add and subtract decimals 5. Multiply by 10, 100 and 1,000 6. Divide by 10, 100 and 1,000 7. Multiply decimals by integers 8. Divide decimals by integers 9. Multiply and divide decimals in context <p>Vocabulary: All previous vocabulary recapped and extended</p>	<p>Sequence:</p> <ol style="list-style-type: none"> 1. Line graphs 2. Dual bar charts 3. Read and interpret pie charts 4. Pie charts with percentages 5. Draw pie charts 6. The mean <p>Vocabulary: Pie chart, mean</p>		

Maths Curriculum Overview



National Curriculum Links

Science

- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

Computing

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

History

- continue to develop a chronologically secure knowledge and understanding of British, local and world history

Geography

- collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Music

- understand and explore how music is created, produced and communicated, including... structure and appropriate musical notations.

Design and Technology

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design