

'Roots to Grow and Wings to Fly'



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Curriculum Progression Document

Maths

Updated September 2025



'Roots to Grow and Wings to Fly'

St Bartholomew's Maths Curriculum

INTENT

We believe that all children should have:

- A secure understanding of maths and number.
- A positive and resilient attitude towards mathematics and an awareness of the fascination of mathematics.
- Competence and confidence in mathematical knowledge, concepts and skills.
- An ability to solve problems, to reason, to think logically and to work systematically and accurately.
- A range of learning strategies: working both collaboratively and independently.
- Fluency in mathematics where children can express ideas confidently and talk about the subject using mathematical language.
- An understanding of the importance of mathematics in everyday life.
- Independent learners who take responsibility for their own learning.

IMPLEMENTATION

Our maths curriculum aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics through placing number and core skills at the heart of our curriculum with daily practice to ensure fluency of number facts
- rehearse and revisit core skills to ensure that recall is fluent and learned written methods are independently used
- experience variation in mathematical representations to ensure that skills can be applied in a wide variety of contexts
- reason mathematically by following a line of enquiry through ensuring discussion plays a vital role in all lessons
- are actively encouraged to discuss with peers and teachers using mathematical language
- can solve problems by ensuring problem solving is embedded in every unit and variation of questions are used to enable children to apply their knowledge to different situations

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Rich connections across mathematical ideas to develop fluency are encouraged through variation of questions which can be seen in every lesson and evidenced in the maths books

Challenge is built into every lesson for pupils who grasp concepts rapidly through sophisticated problems and an opportunity for children to demonstrate their understanding creating their own problems.

Intervention is provided for children who are not sufficiently fluent with earlier material to consolidate their understanding.

Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6. In school, we follow the national curriculum and the following schemes of work as a guide to support teachers with their planning and assessment.

The calculation policy is used within school to ensure a consistent approach to teaching the four operations, building and developing methods year on year from EYFS to Year 6.

Learning has been carefully sequenced to support the development of new skills. Many skills are key pre-requisites of learning new ones, e.g. place value is learned prior to addition and subtraction, division leads onto fractions.

Our emphasis is on number skills first, carefully ordered, throughout our primary curriculum. Our curriculum is based on the White Rose Maths 'Small Steps' and Mastering Number schemes. These are fully in line with the statutory framework for EYFS 2021 and National Curriculum.

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EYFS MATHS Curriculum Overview

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>The children will acquire a deep understanding of number to 10. They will learn about the composition of each number. They will learn to subitise (recognise quantities without counting) to five. They will automatically recall number bonds up to five and some number bonds to 10, including double facts. The children will learn to count verbally beyond 20, recognising the pattern of the counting system. They will compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. The children will explore and represent patterns with numbers up to 10, including odds and evens, double facts and how quantities can be distributed evenly.</p>					
	<ul style="list-style-type: none"> • Understanding of Numbers to 5 • Subitise to 5 (recognising quantities without counting) • Number Recognition and Formation • Early Addition (One More) • Comparing two quantities • Early Subtraction (One Less) • Time (My day) 	<ul style="list-style-type: none"> • Understanding of Numbers to 5 • Subitise to 5 (recognising quantities without counting) • Number Recognition and Formation • Early Addition (One More) • Comparing two quantities • Early Subtraction (One Less) • Time (My day) 	<ul style="list-style-type: none"> • Understanding of Numbers to 10 • Introducing zero • Subitise (recognising quantities without counting) to 5 • Recall number bonds to 5/10 • Addition – combining two groups to find the whole • Exploring Bonds to 10 • Subtraction • Knowledge of more and less and distribution of quantities evenly • Spatial awareness • 2D Shape • 3D Shape 	<ul style="list-style-type: none"> • Understanding of Numbers to 10 • Introducing zero • Subitise (recognising quantities without counting) to 5 • Recall number bonds to 5/10 • Addition – combining two groups to find the whole • Exploring Bonds to 10 • Subtraction • Knowledge of more and less and distribution of quantities evenly • Spatial awareness • 2D Shape • 3D Shape 	<ul style="list-style-type: none"> • Counting to 20 • Understanding of Numbers to 10 • Introducing zero • Subitise (recognising quantities without counting) to 5 • Recall number bonds to 5/10 • Addition – combining two groups to find the whole • Exploring Bonds to 10 • Subtraction • Knowledge of more and less and distribution of quantities evenly • Making simple patterns and exploring more complex patterns • Doubling • Halving & sharing • Odds and evens • Length, height and distance • Weight • Capacity 	<ul style="list-style-type: none"> • Counting to 20 • Understanding of Numbers to 10 • Introducing zero • Subitise (recognising quantities without counting) to 5 • Recall number bonds to 5/10 • Addition – combining two groups to find the whole • Exploring Bonds to 10 • Subtraction • Knowledge of more and less and distribution of quantities evenly • Making simple patterns and exploring more complex patterns • Doubling • Halving & sharing • Odds and evens • Length, height and distance • Weight • Capacity

EYFS Medium-Term Plan

Term	Week number	Theme
Autumn 1	Week 1	<u>Getting To Know You</u>
	Week 2	
	Week 3	
	Week 4	<u>Just Like Me!</u> Match & Sort Compare amounts Compare size, mass and capacity Making simple patterns
	Week 5	
	Week 6	
	Week 7	<u>It's Me 1 2 3!</u>
Autumn 2	Week 1	Representing 1,2 and 3 Comparing 1, 2 and 3 Composition of 1, 2 and 3 Circles and triangles Spatial Awareness
	Week 2	
	Week 3	<u>Light & Dark</u> Four and five One more and one less Shapes with four sides Time: night and day
	Week 4	
	Week 5	
	Week 6	<u>Consolidation</u>
	Week 7	
Spring 1	Week 1	<u>Alive in 5!</u> Introducing zero Comparing numbers to 5 Composition of 4 and 5 Compare mass Compare capacity
	Week 2	
	Week 3	
	Week 4	<u>Growing 6, 7, 8</u> 6, 7 and 8 Combining two groups Length and height
	Week 5	
	Week 6	

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		Time
	Week 7	<u>Building 9 and 10</u>
Spring 2	Week 1	9 and 10
	Week 2	Comparing numbers to 10 Bonds to 10 3D shape Pattern
	Week 3	<u>Consolidation</u>
	Week 4	
	Week 5	
	Week 6	<u>To 20 and Beyond</u>
Summer 1	Week 1	Building numbers beyond 10
	Week 2	Counting patterns beyond 10 Spatial reasoning
	Week 3	<u>First then Now</u>
	Week 4	Adding more
	Week 5	Taking away Spatial reasoning
Summer 2	Week 1	<u>Find my Pattern</u>
	Week 2	Doubling
	Week 3	Sharing & Grouping Even & Odd Spatial reasoning
	Week 4	<u>On the Move</u>
	Week 5	Deepening understanding
	Week 6	Patterns and relationships Spatial Reasoning
	Week 7	<u>Consolidation</u>

EYFS Maths Vocabulary

NUMBER	PLACE VALUE	ESTIMATING
zero number one, two, three ... to twenty and beyond teens numbers, eleven, twelve ... twenty none how many ...? count, count (up) to, count on (from, to), count back (from, to) count in ones, twos, fives, tens is the same as more, less odd, even few pattern pair	ones tens digit the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less compare order size first, second, third... twentieth last, last but one before, after next between	guess how many ...? estimate nearly close to about the same as just over, just under too many, too few enough, not enough

ADDITION AND SUBTRACTION	MULTIPLICATION AND DIVISION	FRACTIONS
add, more, and make, sum, total altogether double one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between	sharing doubling halving number patterns	parts of a whole half quarter
MEASURE	LENGTH	WEIGHT
measure, size compare guess, estimate enough, not enough too much, too little, too many, too few nearly, close to, about the same as just over, just under	metre length, height, width, depth long, short, tall, high, low wide, narrow, thick, thin longer, shorter, taller, higher, longest, shortest, tallest, highest far, near, close	weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

CAPACITY AND VOLUME	TIME	MONEY
full empty half full holds container	time days of the week, Monday, Tuesday ... day, week birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after, next, last now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest, new, newer, newest takes longer, takes less time hour, o'clock, clock, watch, hands	money coin penny, pence, pound price, cost buy, sell spend, spent pay
PROPERTIES OF SHAPE	2D Shape	3D Shape
shape, pattern flat, curved, straight round, hollow, solid sort, make, build, draw size, bigger, larger, smaller symmetrical pattern, repeating pattern match	corner, side rectangle (including square) circle triangle	face, edge, vertex, vertices cube pyramid sphere cone

POSITION AND DIRECTION	STATISTICS	GENERAL
position over, under, above, below top, bottom, side on, in, outside, inside around, in front, behind front, back, beside, next to opposite apart between middle, edge corner direction left, right, up, down forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from movement slide, roll, turn stretch, bend whole turn, half turn	count, sort group, set list	pattern puzzle what could we try next? how did you work it out? recognise describe draw compare sort

KS1 Curriculum Overviews

YEAR 1

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Compare numbers using <, > and = signs</p> <p>Read and write numbers from 1 to 20 in numerals and words</p> <p>Given a number, identify one more and one less.</p> <p>Represent and use number bonds and related subtraction facts within 20</p> <p>Read, write and interpret mathematical statements involving addition (+),</p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p>2-D shapes [for example, rectangles (including squares), circles and triangles]</p> <p>3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</p>	<p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Given a number, identify one more and one less.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p>Read, write and interpret mathematical statements involving addition (+),</p>	<p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>Given a number, identify one more and one less.</p> <p>Compare, describe and solve practical problems for: lengths and height; mass/weight; capacity and volume; time</p> <p>Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time</p>	<p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>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.</p> <p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity.</p> <p>Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p> <p>Describe position, direction and movement, including whole, half, quarter and three-quarter turns.</p> <p>Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top</p>	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Recognise and know the value of different denominations of coins and notes</p> <p>Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].</p>

	<p>subtraction (–) and equals (=) signs.</p> <p>Add and subtract 1-digit and 2-digit numbers to 20, including zero</p>		<p>subtraction (–) and equals (=) signs</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = -9$.</p>		<p>of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside (non-statutory guidance)</p> <p>Practise counting (1, 2, 3...), ordering (for example, 1st, 2nd, 3rd ...) (non-statutory guidance)</p>	<p>Recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>Measure and begin to record time (hours, minutes, seconds)</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p>
<p><u>TIMES</u> <u>TABLE</u> <u>OBJECTIVE</u></p>	<p>Count in multiples of 10 in order up to 120.</p>	<p>Count in 2's up to 24, linking with even numbers and supporting doubles.</p> <p>Count in multiples of 10 in order up to 120.</p>		<p>Focus on counting in multiples of 5 up to 60, linking with knowledge of counting in 10s.</p> <p>Continue to develop fluency of counting in 2's and 10's.</p>	<p>Count in multiples of 10, 2 and 5 in order with growing fluency.</p>	<p>Count in multiples of 10, 2 and 5 in order fluently.</p>

Y1 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	<p>Autumn Block 1 - Place Value (within 10)</p> <ul style="list-style-type: none"> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Compare numbers using <, > and = signs Read and write numbers from 1 to 20 in numerals and words
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	
Autumn 2	Week 1	<p>Autumn Block 2 - Addition and Subtraction (within 10)</p> <ul style="list-style-type: none"> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. Add and subtract 1-digit and 2-digit numbers to 20, including zero Represent and use number bonds and related subtraction facts within 20
	Week 2	
	Week 3	
	Week 4	
	Week 5	<p>Autumn Block 3 – Shape</p> <ul style="list-style-type: none"> Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]; 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]
	Week 6	Consolidation
Spring 1	Week 1	<p>Spring Block 1 - Place Value (within 20)</p> <ul style="list-style-type: none"> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. Read and write numbers from 1 to 20 in numerals and words. Given a number, identify one more and one less.
	Week 2	
	Week 3	
	Week 4	<p>Spring Block 2 - Addition and Subtraction (within 20)</p> <ul style="list-style-type: none"> Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs Add and subtract one-digit and two-digit numbers to 20, including zero. Represent and use number bonds and related subtraction facts within 20.
	Week 5	
	Week 6	

		<ul style="list-style-type: none"> Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = -9$.
Spring 2	Week 1	<u>Spring Block 3 - Place Value (within 50)</u> <ul style="list-style-type: none"> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. Given a number, identify one more and one less.
	Week 2	
	Week 3	<u>Spring Block 4 - Length and Height</u> <ul style="list-style-type: none"> Compare, describe and solve practical problems for: lengths and height; mass/weight; capacity and volume; time Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time
	Week 4	
	Week 5	<u>Spring Block 5 - Mass and Volume</u> <ul style="list-style-type: none"> Compare, describe and solve practical problems for: lengths and height; mass/weight; capacity and volume; time Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time
	Week 6	
Summer 1	Week 1	<u>Summer Block 1 - Multiplication and Division</u> <ul style="list-style-type: none"> Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. 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.
	Week 2	
	Week 3	
	Week 4	<u>Summer Block 2 - Fractions</u> <ul style="list-style-type: none"> Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
	Week 5	
	Week 6	
		<u>Summer Block 3 - Position and Direction</u> <ul style="list-style-type: none"> Describe position, direction and movement, including whole, half, quarter and three-quarter turns. Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside (non-statutory guidance) Practise counting (1, 2, 3...), ordering (for example, 1st, 2nd, 3rd ...) (non-statutory guidance)

Summer 2	Week 1	<u>Summer Block 4 - Place Value (within 100)</u> <ul style="list-style-type: none">• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.• Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.• Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
	Week 2	
	Week 3	<u>Summer Block 5 - Money</u> <ul style="list-style-type: none">• Recognise and know the value of different denominations of coins and notes• Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.
	Week 4	<u>Summer Block 6 - Time</u> <ul style="list-style-type: none">• Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].• Recognise and use language relating to dates, including days of the week, weeks, months and years.• Compare, describe and solve practical problems for time• Measure and begin to record time (hours, minutes, seconds)• Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
	Week 5	
	Week 6	Consolidation

Year 1 Maths Vocabulary

Words in **red** denote new vocabulary for the year group

NUMBER	PLACE VALUE	ADDITION AND SUBTRACTION
number, numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards count in ones, twos, fives, tens equal to, equivalent to is the same as, more, less most, least many odd, even multiple of few pattern pair	ones tens digit the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less equal to one more, ten more, one less, ten less compare order size first, second, third... twentieth last, last but one before, after, next between half-way between above, below	addition add, more, and make, sum, total altogether double near double, half, halve one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between equals, is the same as number bonds/pairs missing number

MULTIPLICATION AND DIVISION	FRACTIONS	MEASURE
<p> multiplication multiply multiplied by multiple division dividing grouping sharing doubling halving array number patterns </p>	<p> fraction equal part equal grouping equal sharing parts of a whole half one of two equal parts quarter one of four equal parts </p>	<p> measure measurement size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as roughly just over, just under </p>
LENGTH	WEIGHT	CAPACITY AND VOLUME
<p> centimetre, metre length, height, width, depth long, short, tall, high, low wide, narrow, thick, thin longer, shorter, taller, higher longest, shortest, tallest, highest far, near, close ruler metre stick </p>	<p> kilogram, half kilogram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales </p>	<p> litre, half litre capacity volume full, empty more than less than half full quarter full holds container </p>

TIME	MONEY	PROPERTIES OF SHAPE
<p>days of the week, Monday, Tuesday ... months (January, February ...), seasons, spring, summer, autumn, winter day, week, weekend, month, year birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after, earlier, later next, first, last, midnight, date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest, new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually, once, twice hour, o'clock, half past, quarter past, quarter to clock, clock face, watch, hands hour hand, minute hand hours, minutes</p>	<p>money coin penny, pence, pound price, cost buy, sell spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total</p>	<p>shape, pattern flat curved, straight round hollow, solid sort make, build, draw size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern pattern, repeating pattern match</p>

2D SHAPE	3D SHAPE	POSITION AND DIRECTION
<p>corner, side point, pointed rectangle (including square) circle triangle</p>	<p>face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder</p>	<p>position over, under, underneath, above, below top, bottom, side on, in, outside, inside around, in front, behind front, back beside, next to, opposite, apart, between middle, edge centre, corner direction, journey left, right, up, down forwards, backwards, sideways across, next to, close, near, far along, through to, from, towards, away from movement slide, roll, turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn</p>

STATISTICS	GENERAL	
count, sort, vote group, set list, table	pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? explain your thinking recognise describe draw compare sort	

Y2 MATHS Curriculum Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p>Read and write numbers from 1 to 20 in numerals and words (Y1)</p> <p>Read and write numbers to at least 100 in numerals and in words</p> <p>Identify, represent and estimate numbers using different representations, including the number line</p> <p>Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward</p> <p>Recognise the place value of each digit in a 2-digit number (tens, ones)</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Represent and use number bonds and related subtraction facts within 20 (Y1)</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>	<p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line</p> <p>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>Identify 2-D shapes on the surface of 3-D shapes</p> <p>Compare and sort common 2-D and 3-D shapes and everyday objects</p>	<p>Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p>	<p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels</p> <p>Compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p> <p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication</p>	<p>Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity</p> <p>Write simple fractions, for example $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$</p> <p>Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clockface to show these times</p> <p>Know the number of minutes in an hour and the number of hours in a day</p>	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>Ask and answer questions about totalling and comparing categorical data</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)</p>

				<p>and division facts, including problems in contexts</p> <p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$</p>		
<p><u>TIMES TABLE OBJECTIVE</u></p>	<p>Consolidate counting in steps of 2, 5 and 10 in order from 0 up to 12x.</p>	<p>Count in steps of 2 and 5 from 0 up to 12x fluently. Recall multiples of 10 up to 12x10 in any order, including missing numbers and related division facts with growing fluency.</p>	<p>Recall multiples of 2 up to 12x2 in any order, including missing numbers and related division facts. Recall multiples of 10 up to 12x10 fluently.</p>	<p>Recall multiples of 5 up to 12x5 in any order, including missing numbers and related division facts. Recall multiples of 2 up to 12x2 in any order, including missing numbers and related division facts with growing fluency.</p>	<p>Count in multiples of 3 to 12x3 in order from 0. Recall multiples of 2 up to 12x2 in any order, including missing numbers and related division facts fluently. Recall multiples of 5 up to 12x5 in any order, including missing numbers and related division facts with growing fluency.</p>	<p>Count in multiples of 3 to 12x3 in order from 0 with growing fluency. Recall multiples of 5 up to 12x5 in any order, including missing numbers and related division facts fluently..</p>

Y2 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	Autumn Block 1 - Place Value <ul style="list-style-type: none"> • Read and write numbers from 1 to 20 in numerals and words (Y1) • Read and write numbers to at least 100 in numerals and in words • Identify, represent and estimate numbers using different representations, including the number line • Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward • Recognise the place value of each digit in a 2-digit number (tens, ones) • Compare and order numbers from 0 up to 100; use <, > and = signs
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	
Autumn 2	Week 1	Autumn Block 2 - Addition and Subtraction <ul style="list-style-type: none"> • Represent and use number bonds and related subtraction facts within 20 (Y1) • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers • Compare and order numbers from 0 up to 100; use <, > and = signs
	Week 2	
	Week 3	
	Week 4	Autumn Block 3 - Shape <ul style="list-style-type: none"> • Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • Identify 2-D shapes on the surface of 3-D shapes • Compare and sort common 2-D and 3-D shapes and everyday objects
	Week 5	
	Week 6	
Spring 1	Week 1	Spring Block 1 - Money <ul style="list-style-type: none"> • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
	Week 2	
	Week 3	Spring Block 2 - Multiplication and Division <ul style="list-style-type: none"> • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs
	Week 4	
	Week 5	

Spring 2	Week 6	<ul style="list-style-type: none"> • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
	Week 1	
	Week 2	<p><u>Spring Block 3 - Length and Height</u></p> <ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and = • Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
	Week 3	
	Week 4	<p><u>Spring Block 4 - Mass, Capacity and Temperature</u></p> <ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and =
	Week 5	
Week 6		
Summer 1	Week 1	<p><u>Summer Block 1 - Fractions</u></p> <ul style="list-style-type: none"> • Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • Write simple fractions, for example $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$
	Week 2	
	Week 3	
	Week 4	<p><u>Summer Block 2 - Time</u></p> <ul style="list-style-type: none"> • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clockface to show these times • Know the number of minutes in an hour and the number of hours in a day
	Week 5	
	Week 6	
Summer 2	Week 1	<p><u>Summer Block 3 - Statistics</u></p> <ul style="list-style-type: none"> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
	Week 2	

		<ul style="list-style-type: none">• Ask and answer questions about totalling and comparing categorical data• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
	Week 3	Summer Block 4 - Position and Direction <ul style="list-style-type: none">• Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)
	Week 4	
	Week 5	Consolidation
	Week 6	

Year 2 Maths Vocabulary

Words in **red** denote new vocabulary for the year group

NUMBER	PLACE VALUE	ESTIMATING
number	ones	guess
numeral	tens, hundreds	how many ...?
zero	digit	estimate
one, two, three ... twenty	one-, two- or three-digit number	nearly
teens numbers, eleven, twelve ...	place, place value	roughly
twenty	stands for, represents	close to
twenty-one, twenty-two ... one	exchange	about the same as
hundred, two hundred ... one thousand	the same number as, as many as	just over, just under
none	more, larger, bigger, greater	exact, exactly
how many ...?	fewer, smaller, less	too many, too few
count, count (up) to, count on (from, to), count back (from, to)	fewest, smallest, least	enough, not enough
forwards	most, biggest, largest, greatest	
backwards	one more, ten more	
count in ones, twos, fives, tens, threes, fours and so on	one less, ten less	
equal to	equal to	
equivalent to	compare	
is the same as	order	
more, less	size	
most, least	first, second, third ... twentieth	
tally	twenty-first, twenty-second ...	
	last, last but one	
	before, after	

<p>many odd, even multiple of sequence continue predict few pattern pair, rule > greater than < less than</p>	<p>next between halfway between above, below</p>	
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ADDITION AND SUBTRACTION	MULTIPLICATION AND DIVISION	FRACTIONS
<p>addition add, more, and make, sum, total, altogether double, near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs/facts tens boundary</p>	<p>multiplication, multiply multiplied by, multiple groups of times once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into grouping sharing, share, share equally left, left over one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling, halving array row, column number patterns multiplication table multiplication fact, division fact</p>	<p>fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts</p>

MEASUREMENT	LENGTH	WEIGHT
measure, measurement size compare, measuring scale guess, estimate enough, not enough too much, too little, too many, too few nearly, close to, about the same as roughly just over, just under	centimetre, metre length, height, width, depth long, short, tall, high, low wide, narrow, thick, thin longer, shorter, taller, higher longest, shortest, tallest, highest far, further, furthest , near, close ruler metre stick, tape measure	kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales
CAPACITY AND VOLUME	TEMPERATURE	MONEY
litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container	temperature degree	money, coin penny, pence, pound price, cost buy, bought , sell, sold spend, spent pay, change dear, costs more cheap, costs less, cheaper costs the same as how much ...?, how many ...? total

TIME	POSITION AND DIRECTION	STATISTICS
days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight , month, year birthday, holiday morning, afternoon, evening, night bedtime, dinnertime, playtime today, yesterday, tomorrow before, after earlier, later next, first, last midnight date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...?	position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down higher, lower forwards, backwards, sideways across next to, close, near, far	count, tally , sort, vote graph, block graph, pictogram represent group, set list, table label, title most popular, most common least popular, least common

<p>how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds</p>	<p>along through to, from, towards, away from clockwise, anticlockwise movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn right angle straight line</p>	
<p>PROPERTIES OF SHAPE</p>	<p>2D SHAPE</p>	<p>3D SHAPE</p>
<p>shape, pattern flat curved, straight round hollow, solid sort make, build, draw surface size bigger, larger, smaller</p>	<p>corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon hexagon octagon</p>	<p>face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder</p>

symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match		
GENERAL		
pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise, describe, draw, compare sort mental calculation written calculation		

YEAR 3 MATHS Curriculum Overview

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>Identify, represent and estimate numbers using different representations</p> <p>Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones)</p> <p>Count from zero in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</p> <p>Read and write numbers up to 1,000 in numerals and words</p> <p>Compare and order numbers up to 1,000</p> <p>Add and subtract numbers mentally, including: a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and hundreds</p>	<p>Add and subtract numbers mentally, including: a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and hundreds</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division on one number by another cannot (Y2)</p> <p>Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward (Y2)</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables,</p>	<p>Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2)</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p> <p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>Measure the perimeter of simple 2-D shapes</p>	<p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>Compare and order unit fractions, and fractions with the same denominators</p> <p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>Recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p>	<p>Add and subtract fractions with the same denominator within one whole</p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p>	<p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>Compare durations of events</p> <p>Recognise angles as a property of shape or a description of a turn</p> <p>Identify right angles, recognise that two right angles make a half turn, three make three-quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle</p>

		<p>including recognising odd and even numbers (Y2)</p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods</p>				<p>Measure the perimeter of simple 2-D shapes</p> <p>Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p> <p>Interpret and present data using bar charts, pictograms and tables</p> <p>Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables</p>
<p><u>TIMES</u> <u>TABLE</u> <u>OBJECTIVE</u></p>	<p>Count in multiples of 3 to 12x3 in order from 0 fluently.</p>	<p>Recall multiples of 3 up to 12x3 in any order, including missing numbers</p> <p>and related division facts with growing fluency.</p>	<p>Recall multiples of 3 up to 12x3 in any order, including missing numbers and related division facts fluently.</p>	<p>Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts with growing fluency.</p> <p>Count in multiples of 8 to 12x8 in order from 0 fluently.</p>	<p>Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts fluently.</p> <p>Recall multiples of 8 up to 12x8 in any order, including missing numbers and related</p>	<p>Recall multiples of 8 up to 12x8 in any order, including missing numbers and related division facts fluently.</p>

'Roots to Grow and Wings to Fly'

		Count in multiples of 4 to 12x4 in order from 0 with growing fluency.	Count in multiples of 4 to 12x4 in order from 0 with fluently.		division facts with growing fluency.	
		Introduce (relating to x4) and begin to count in multiples of 8 from 0 to 12x8.	Count in multiples of 8 to 12x8 in order from 0 with growing fluency.			

Year 3 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	Autumn Block 1 - Place Value <ul style="list-style-type: none"> Identify, represent and estimate numbers using different representations Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) Count from zero in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Read and write numbers up to 1,000 in numerals and words Compare and order numbers up to 1,000
	Week 2	
	Week 3	
	Week 4	Autumn Block 2 - Addition & Subtraction <ul style="list-style-type: none"> Add and subtract numbers mentally, including: a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Estimate the answer to a calculation and use inverse operations to check answers
	Week 5	
	Week 6	
Autumn 2	Week 1	Autumn Block 3 - Multiplication and Division A <ul style="list-style-type: none"> Show that multiplication of two numbers can be done in any order (commutative) and division on one number by another cannot (Y2) Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward (Y2) Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2) Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods
	Week 2	
	Week 3	
	Week 4	Spring Block 1 – Multiplication and Division B <ul style="list-style-type: none"> Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2) Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods
	Week 5	
	Week 6	
Spring 1	Week 1	
	Week 2	
	Week 3	

		<ul style="list-style-type: none"> Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
	Week 4	Spring Block 2 – Length and Perimeter <ul style="list-style-type: none"> Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Measure the perimeter of simple 2-D shapes
	Week 5	
	Week 6	
Spring 2	Week 1	Spring Block 3 – Fractions A <ul style="list-style-type: none"> Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Compare and order unit fractions, and fractions with the same denominators Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Recognise and show, using diagrams, equivalent fractions with small denominators
	Week 2	
	Week 3	
	Week 4	Spring Block 4 – Mass and Capacity <ul style="list-style-type: none"> Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
	Week 5	
	Week 6	
Summer 1	Week 1	Summer Block 1 - Fractions B <ul style="list-style-type: none"> Add and subtract fractions with the same denominator within one whole Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
	Week 2	
	Week 3	Summer Block 2 – Money <ul style="list-style-type: none"> Add and subtract amounts of money to give change, using both £ and p in practical contexts
	Week 4	
	Week 5	Summer Block 3 – Time <ul style="list-style-type: none"> Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight Know the number of seconds in a minute and the number of days in each month, year and leap year Compare durations of events
	Week 6	
Summer 2	Week 1	

	Week 2	Summer Block 4 – Shape <ul style="list-style-type: none">• Recognise angles as a property of shape or a description of a turn• Identify right angles, recognise that two right angles make a half turn, three make three-quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle• Measure the perimeter of simple 2-D shapes• Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines
	Week 3	
	Week 4	Summer Block 5 – Statistics <ul style="list-style-type: none">• Interpret and present data using bar charts, pictograms and tables• Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables
	Week 5	
	Week 6	Consolidation

Year 3 Maths Vocabulary

Words in **red** denote new vocabulary for the year group

NUMBER	PLACE VALUE	ESTIMATING
number	ones	guess
numeral	tens, hundreds	how many ...?
zero	digit	estimate
one, two, three ... twenty	one-, two- or three-digit number	nearly
teens numbers, eleven, twelve ...	place, place value	roughly
twenty	stands for, represents	close to
twenty-one, twenty-two ... one	exchange	approximate, approximately
hundred, two hundred ... one thousand	the same number as, as many as	about the same as
none	more, larger, bigger, greater	just over, just under
how many ...?	fewer, smaller, less	exact, exactly
count, count (up) to, count on (from, to), count back (from, to)	fewest, smallest, least	too many, too few
forwards	most, biggest, largest, greatest	enough, not enough
backwards	one more, ten more, one hundred more	round, nearest, round to the nearest ten,
count in ones, twos, fives, tens, threes, fours, eights, fifties and so on to hundreds	one less, ten less, one hundred less	hundred
equal to	equal to	round up, round down
equivalent to	compare	
is the same as	order	
more, less	size	
most, least	first, second, third ... twentieth	
	twenty-first, twenty-second ...	
	last, last but one	
	before, after	

<p>tally many odd, even multiple of, factor of sequence continue predict few pattern pair, rule relationship > greater than < less than Roman numerals</p>	<p>next between halfway between above, below</p>	
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ADDITION AND SUBTRACTION	MULTIPLICATION AND DIVISION	FRACTIONS
addition add, more, and make, sum, total altogether double, near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary	multiplication multiply, multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact	fraction equivalent fraction mixed number numerator, denominator equal part, equal grouping equal sharing parts of a whole, half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ...

MEASUREMENT	LENGTH	WEIGHT
measure measurement size compare measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under	millimetre , centimetre, metre, kilometre, mile length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from perimeter ruler metre stick, tape measure	kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

CAPACITY AND VOLUME	TEMPERATURE	TIME
litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container	temperature degree centigrade Celsius	time days, Monday, Tuesday ... months (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, century, birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after, earlier, later next, first, last midnight, calendar, date now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest, new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes, usually

		<p>once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds Roman numerals 12-hour clock time, 24-hour clock time</p>
MONEY	PROPERTIES OF SHAPE	2D SHAPE
<p>money, coin penny, pence, pound price, cost, buy, bought, sell, sold spend, spent, pay, change dear, costs more, cheap, costs less, cheaper, costs the same as how much ...? how many ...? total</p>	<p>shape, pattern flat, curved, straight round, hollow, solid sort, make, build, draw perimeter, surface, size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match 2-D shape</p>	<p>corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon, pentagonal hexagon, hexagonal octagon, octagonal quadrilateral right-angled parallel, perpendicular</p>

3D SHAPE	POSITION AND DIRECTION	STATISTICS
face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere cone cylinder prism, triangular prism	position, over, under, underneath, above, below, top, bottom, side on, in, outside, inside, around, in front, behind, front, back beside, next to, opposite apart, between middle, edge, centre, corner direction, journey, route left, right, up, down, higher, lower forwards, backwards, sideways across, next to, close, near, far along, through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W horizontal, vertical, diagonal movement slide, roll, turn, stretch, bend whole turn, half turn, quarter turn, three-quarter turn angle ... is a greater/smaller angle than right angle, acute angle obtuse angle, straight line	count, tally, sort, vote graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common

GENERAL

pattern

puzzle

problem, problem-solving

mental, mentally

what could we try next?

how did you work it out?

show how you ...

explain your thinking, explain your method, describe the pattern, describe the rule

investigate

recognise

describe

draw

compare, sort

greatest value, least value

mental calculation, written calculation

statement

YEAR 4 MATHS Curriculum Overview

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>Read and write numbers up to 1,000 in numerals and words (Y3)</p> <p>Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) (Y3)</p> <p>Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)</p> <p>Identify, represent and estimate numbers using different representations</p> <p>Count in multiples of 6, 7, 9, 25 and 1,000</p> <p>Find 1,000 more or less than a given number</p> <p>Order and compare numbers beyond 1,000</p> <p>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the</p>	<p>Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate</p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p>Find the area of rectilinear shapes by counting squares</p> <p>Recall multiplication and division facts for multiplication tables up to 12×12</p> <p>Recognise and use factor pairs and commutativity in mental calculations</p> <p>Count in multiples of 6, 7, 9, 25 and 1,000</p>	<p>Recognise and use factor pairs and commutativity in mental calculations</p> <p>Recall multiplication and division facts for multiplication tables up to 12×12</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5)</p> <p>Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</p> <p>Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout</p> <p>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1;</p>	<p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3)</p> <p>Recognise and show, using diagrams, families of common equivalent fractions</p> <p>Add and subtract fractions with the same denominator</p> <p>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3)</p> <p>Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>Recognise and show, using diagrams, families of</p>	<p>Recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>Solve simple measure and money problems involving fractions and decimals to 2 decimal places</p> <p>Round decimals with 1 decimal place to the nearest whole number</p> <p>Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence</p> <p>Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days</p> <p>Read, write and convert time between analogue and digital 12- and 24-hour clocks</p>	<p>Recognise angles as a property of shape or a description of a turn (Y3)</p> <p>Identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry</p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, line and time graphs</p> <p>Solve comparison, sum and difference problems using</p>

	<p>concept of zero and place value</p> <p>Round any number to the nearest 10, 100 or 1,000</p> <p>Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate</p>	<p>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</p>	<p>dividing by 1; multiplying together 3 numbers</p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p>	<p>common equivalent fractions</p> <p>Compare numbers with the same number of decimal places up to 2 decimal places</p> <p>Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p>		<p>information presented in bar charts, pictograms, tables and other graphs</p> <p>Describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>Plot specified points and draw sides to complete a given polygon</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down</p>
<p><u>TIMES TABLE OBJECTIVE</u></p>	<p>Recall multiples of 3,4 and 8 up to 12x in any order, including missing numbers and related division facts fluently.</p> <p>Fluently count in 6’s in order up to 12x6, using multiples of 3 to support.</p>	<p>Recall multiples of 6 in any order, including missing numbers and related division facts with growing fluency.</p> <p>Fluently count in 7’s in order up to 12x7.</p>	<p>Recall multiples of 6 in any order, including missing numbers and related division facts fluently.</p> <p>Recall multiples of 7 in any order, including missing numbers and related division facts with growing fluency.</p>	<p>Recall multiples of 7 in any order, including missing numbers and related division facts fluently.</p> <p>Fluently count in 9’s in order up to 12x9.</p> <p>Fluently count in 11’s in order up to 12x11.</p>	<p>Recall multiples of 9 in any order, including missing numbers and related division facts with growing fluency (using 10x and adjusting by 1 group to find 9x)</p> <p>Recall multiples of 11 in any order, including missing numbers and related division facts fluently.</p> <p>Fluently count in 12’s in order up to 12x12.</p>	<p>Recall multiples of 9 in any order, including missing numbers and related division facts fluently.</p> <p>Recall multiples of 12 in any order, including missing numbers and related division facts with growing fluency (using 10x and adjusting by adding 2 more groups).</p>

Year 4 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	<p>Autumn Block 1 - Place Value</p> <ul style="list-style-type: none"> • Read and write numbers up to 1,000 in numerals and words (Y3) • Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) (Y3) • Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones) • Identify, represent and estimate numbers using different representations • Count in multiples of 6, 7, 9, 25 and 1,000 • Find 1,000 more or less than a given number • Order and compare numbers beyond 1,000 • Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value • Round any number to the nearest 10, 100 or 1,000
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	
Autumn 2	Week 1	<p>Autumn Block 2 - Addition and Subtraction</p> <ul style="list-style-type: none"> • Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why • Estimate and use inverse operations to check answers to a calculation
	Week 2	<p>Autumn Block 3 - Area</p> <ul style="list-style-type: none"> • Find the area of rectilinear shapes by counting squares
	Week 3	<p>Autumn Block 4 - Multiplication and Division A</p> <ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12 • Recognise and use factor pairs and commutativity in mental calculations • Count in multiples of 6, 7, 9, 25 and 1,000 • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
	Week 4	
	Week 5	
	Week 6	Consolidation

Spring 1	Week 1	<p><u>Spring Block 1 - Multiplication and Division B</u></p> <ul style="list-style-type: none"> • Recognise and use factor pairs and commutativity in mental calculations • Recall multiplication and division facts for multiplication tables up to 12×12 • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5) • Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects • Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	
Spring 2	Week 1	<p><u>Spring Block 2 - Length and Perimeter</u></p> <ul style="list-style-type: none"> • Convert between different units of measure [for example, kilometre to metre; hour to minute] • Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
	Week 2	
	Week 3	
	Week 4	<p><u>Spring Block 3 - Fractions</u></p> <ul style="list-style-type: none"> • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3) • Recognise and show, using diagrams, families of common equivalent fractions • Add and subtract fractions with the same denominator
	Week 5	
	Week 6	
Summer 1	Week 1	<p><u>Spring Block 4 - Decimals A</u></p> <ul style="list-style-type: none"> • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3) • Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 • Recognise and write decimal equivalents of any number of tenths or hundredths • Recognise and show, using diagrams, families of common equivalent fractions • Compare numbers with the same number of decimal places up to 2 decimal places • Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	
Summer 1	Week 1	<p><u>Summer Block 1 - Decimals B</u></p> <ul style="list-style-type: none"> • Recognise and write decimal equivalents of any number of tenths or hundredths • Solve simple measure and money problems involving fractions and decimals to 2 decimal places • Round decimals with 1 decimal place to the nearest whole number • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$
	Week 2	

	Week 3	Summer Block 2 - Money <ul style="list-style-type: none">• Estimate, compare and calculate different measures, including money in pounds and pence
	Week 4	
	Week 5	Summer Block 3 - Time <ul style="list-style-type: none">• Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days• Read, write and convert time between analogue and digital 12- and 24-hour clocks
	Week 6	
Summer 2	Week 1	Consolidation
	Week 2	Summer Block 4 - Shape <ul style="list-style-type: none">• Recognise angles as a property of shape or a description of a turn (Y3)• Identify acute and obtuse angles and compare and order angles up to two right angles by size• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes• Identify lines of symmetry in 2-D shapes presented in different orientations• Complete a simple symmetric figure with respect to a specific line of symmetry
	Week 3	
	Week 4	Summer Block 5 - Statistics <ul style="list-style-type: none">• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, line and time graphs• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
	Week 5	Summer Block 6 - Position and Direction <ul style="list-style-type: none">• Describe positions on a 2-D grid as coordinates in the first quadrant• Plot specified points and draw sides to complete a given polygon• Describe movements between positions as translations of a given unit to the left/right and up/down
	Week 6	

Year 4 Maths Vocabulary

Words in **red** denote new vocabulary for the year group

NUMBER	PLACE VALUE	ESTIMATING
number	ones	guess
numeral	tens, hundreds	how many
zero	digit	estimate
one, two, three ... twenty	one-, two- or three-digit number	nearly
teens numbers, eleven, twelve ...	place, place value	roughly
twenty	stands for, represents	close to
twenty-one, twenty-two ... one	exchange	approximate, approximately
hundred, two hundred ... one	the same number as, as many as	about the same as
thousand ... ten thousand, hundred thousand, million	more, larger, bigger, greater	just over, just under
none	fewer, smaller, less	exact, exactly
how many ...?	fewest, smallest, least	too many, too few
count, count (up) to, count on (from, to),	most, biggest, largest, greatest	enough, not enough
count back (from, to)	one more, ten more, one hundred more, one thousand more	round, nearest, round to the nearest
forwards, backwards	one less, ten less, one hundred less, one thousand less	ten,
count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on	equal to	hundred, thousand
to hundreds, thousands	compare	round up, round down
equal to, equivalent to	order	
	size	
	first, second, third ... twentieth	

is the same as more, less most, least tally many odd, even multiple of, factor of sequence continue predict few pattern pair, rule relationship next, consecutive > greater than < less than Roman numerals integer, positive, negative above/below zero, minus negative numbers	twenty-first, twenty-second ... last, last but on before, after next between halfway between above, below	
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ADDITION AND SUBTRACTION	MULTIPLICATION AND DIVISION	FRACTIONS
addition add, more, and, make, sum, total altogether double, near double half, halve one more, two more... ten more... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals, is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary inverse	multiplication, multiply multiplied by multiple, factor groups of times, product once, twice, three times ... ten times repeated addition division, dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling, halving array, row, column number patterns multiplication table multiplication fact, division fact inverse square, squared, cube, cubed	fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ...hundredths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion

MEASUREMENT	LENGTH	WEIGHT
measure measurement size compare unit, standard unit metric unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under	millimetre, centimetre, metre, kilometre, mile length, height, width, depth, breadth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from edge, perimeter area, covers square centimetre (cm ²) ruler metre stick, tape measure	mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/lightest kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

CAPACITY AND VOLUME	TEMPERATURE	TIME
litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container, measuring cylinder	temperature degree centigrade Celsius	time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, leap year , century, millennium birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last noon, midnight calendar, date, date of birth now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest

		<p>new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals 12-hour clock time, 24-hour clock time</p>
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MONEY	PROPERTIES OF SHAPE	2D SHAPE
money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total	shape, pattern flat, line curved, straight round hollow, solid sort make, build, construct , draw, sketch perimeter centre surface angle, right-angled base, square-based size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry reflect, reflection pattern, repeating pattern match regular, irregular	2-D, two-dimensional corner, side point, pointed rectangle (including square), rectangular, oblong rectilinear circle, circular triangle, triangular equilateral triangle, isosceles triangle, scalene triangle pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal quadrilateral parallelogram, rhombus, trapezium polygon right-angled parallel, perpendicular

3D SHAPE	POSITION AND DIRECTION	
<p>3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron</p>	<p>position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down higher, lower forwards, backwards, sideways across</p>	

	<p>next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W north-east, north-west, south-east, south-west, NE, NW, SE, SW horizontal, vertical, diagonal translate, translation movement slide, roll, turn, stretch, bend whole turn, half turn, quarter turn, three-quarter turn rotate, rotation angle, is a greater/smaller angle than degree right angle, acute angle, obtuse angle reflection straight line ruler, set square angle measurer, compass</p>	
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STATISTICS	GENERAL
<p>count, tally, sort, vote survey, questionnaire, data graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common</p>	<p>pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation, written calculation statement justify make a statement</p>

YEAR 5 MATHS Curriculum Overview

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals</p> <p>Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000</p> <p>Solve number problems and practical problems involving the above</p> <p>Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000</p> <p>Add and subtract numbers mentally with increasingly large numbers</p> <p>Add and subtract whole numbers with more than four digits, including using formal</p>	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000</p>	<p>Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers</p> <p>Divide up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context</p> <p>Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p> <p>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the</p>	<p>Read, write, order and compare numbers with up to 3 decimal places</p> <p>Read and write decimal numbers as fractions</p> <p>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p> <p>Solve problems involving numbers up to 3 decimal places</p> <p>Round decimals with 2 decimal places to the</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>Draw given angles, and measure them in degrees (°)</p> <p>Identify: angles at a point and 1 whole turn (total 360°); angles at a point on a straight line and half a turn (total 180°)</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p> <p>Identify 3-D shapes, including cubes and other cuboids, from 2-D representations</p> <p>Identify, describe and represent the position of a shape following a reflection</p>	<p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p> <p>Solve problems involving number up to 3 decimal places</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre]</p> <p>Understand and use approximate equivalences between metric units and</p>

	<p>written methods (columnar addition and subtraction)</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p>	<p>Multiply and divide numbers mentally, drawing upon known facts</p> <p>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number</p> <p>Compare and order fractions whose denominators are all multiples of the same number</p> <p>Add and subtract fractions with the same denominator, and denominators that are multiples of the same number</p>	<p>answer is a whole number (Y4)</p>	<p>nearest whole number and to 1 decimal place</p> <p>Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction</p> <p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes</p> <p>Solve comparison, sum and difference problems using information presented in a line graph</p> <p>Complete, read and interpret information in tables, including timetables</p>	<p>or translation, using the appropriate language, and know that the shape has not changed</p>	<p>common imperial units such as inches, pounds and pints</p> <p>Solve problems involving converting between units of time</p> <p>Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity</p> <p>Estimate volume and capacity [for example, using water]</p>
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<p><u>TIMES</u> <u>TABLE</u> <u>OBJECTIVE</u></p>	<p>Recap 9x / 7x / 11x / 12x tables.</p> <p>All children to meet ARE requirements by half term.</p>	<p>Related division facts for 3x / 4x / 6x / 8x including missing numbers</p>	<p>Related division facts for 8x / 9x / 7x including missing numbers</p> <p>One step word problems involving times table facts (either multiplication or division)</p>	<p>Related division facts for 7x / 11x / 12x including missing numbers</p> <p>One/Two step word problems involving times table facts (either multiplication or division)</p>	<p>Two-step word problems using times table facts (either multiplication or division)</p>	<p>Two-step word problems using times table facts (either multiplication, division or both)</p>
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Year 5 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	Autumn Block 1 - Place Value <ul style="list-style-type: none"> • Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals • Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit • Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 • Solve number problems and practical problems involving the above • Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000
	Week 2	
	Week 3	
	Week 4	Autumn Block 2 - Addition and Subtraction <ul style="list-style-type: none"> • Add and subtract numbers mentally with increasingly large numbers • Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction) • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
	Week 5	
	Week 6	Autumn Block 3 - Multiplication and Division A <ul style="list-style-type: none"> • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 19 • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 • Multiply and divide numbers mentally, drawing upon known facts
Autumn 2	Week 1	
	Week 2	
	Week 3	Autumn Block 4 - Fractions A <ul style="list-style-type: none"> • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
	Week 4	
	Week 5	
	Week 6	

		<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number Compare and order fractions whose denominators are all multiples of the same number Add and subtract fractions with the same denominator, and denominators that are multiples of the same number
Spring 1	Week 1	<p><u>Spring Block 1 - Multiplication and Division B</u></p> <ul style="list-style-type: none"> Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers Divide up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes
	Week 2	
	Week 3	
	Week 4	<p><u>Spring Block 2 - Fractions B</u></p> <ul style="list-style-type: none"> Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number (Y4)
	Week 5	
	Week 6	<p><u>Spring Block 3 - Decimals and Percentages</u></p> <ul style="list-style-type: none"> Read, write, order and compare numbers with up to 3 decimal places Read and write decimal numbers as fractions Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Solve problems involving numbers up to 3 decimal places Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per 100”, and write percentages as a fraction with denominator 100, and as a decimal fraction
Spring 2	Week 1	
	Week 2	

	Week 3	<u>Spring Block 4 - Perimeter and Area</u>
	Week 4	
	Week 5	<u>Spring Block 5 – Statistics</u>
	Week 6	
Summer 1	Week 1	<u>Summer Block 1 – Shape</u>
	Week 2	
	Week 3	
	Week 4	<u>Summer Block 2 - Position and Direction</u>
	Week 5	
	Week 6	<u>Summer Block 3 – Decimals</u>
Summer 2	Week 1	
	Week 2	
	Week 3	<u>Summer Block 4 - Negative Numbers</u>
	Week 4	<u>Summer Block 5 - Converting Units</u>
	Week 5	

		<ul style="list-style-type: none">• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints• Solve problems involving converting between units of time
	Week 6	Summer Block 6 – Volume <ul style="list-style-type: none">• Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity• Estimate volume and capacity [for example, using water]

Year 5 Maths Vocabulary

Words in **red** denote new vocabulary for the year group

NUMBER	PLACE VALUE	ESTIMATING
number	ones	guess
numeral	tens, hundreds	how many
zero	digit	estimate
one, two, three ... twenty	one-, two- or three-digit number	nearly
teens numbers, eleven, twelve ...	place, place value	roughly
twenty	stands for, represents	close to
twenty-one, twenty-two ... one	exchange	approximate, approximately
hundred, two hundred ... one	the same number as, as many as	about the same as
thousand ... ten thousand, hundred	more, larger, bigger, greater	just over, just under
thousand, million	fewer, smaller, less	exact, exactly
none	fewest, smallest, least	too many, too few
how many ...?	most, biggest, largest, greatest	enough, not enough
count, count (up) to, count on (from, to),	one more, ten more, one hundred more, one thousand more	round, nearest, round to the nearest
count back (from, to)	one less, ten less, one hundred less, one thousand less	ten, hundred, thousand, ten thousand
forwards, backwards	equal to	round up, round down
count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on	compare	
to hundreds, thousands	order	
equal to, equivalent to	size	
	first, second, third ... twentieth	

is the same as more, less most, least tally many odd, even multiple of, factor of factor pair sequence continue predict few pattern pair, rule relationship next, consecutive > greater than < less than ≥ greater than or equal to ≤ less than or equal to Roman numerals integer, positive, negative above/below zero, minus negative numbers	twenty-first, twenty-second ... last, last but on before, after next between halfway between above, below	
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<p>formula divisibility square number prime number ascending/descending order</p>		
<p>ADDITION AND SUBTRACTION</p>	<p>MULTIPLICATION AND DIVISION</p>	<p>FRACTIONS</p>
<p>addition add, more, and, make, sum, total altogether double, near double half, halve one more, two more... ten more... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between</p>	<p>multiplication, multiply multiplied by multiple, factor groups of times, product once, twice, three times ... ten times repeated addition division, dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling, halving array, row, column</p>	<p>Fraction, proper/improper fraction equivalent fraction mixed number numerator, denominator equivalent, reduced to, cancel equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ...hundredths, thousandths</p>

<p>equals, is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary, ones boundary, tenths boundary inverse</p>	<p>number patterns multiplication table multiplication fact, division fact inverse square, squared, cube, cubed</p>	<p>decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion, in every, for every percentage, per cent, %</p>
MEASUREMENT	LENGTH	WEIGHT
<p>measure measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under</p>	<p>millimetre, centimetre, metre, kilometre, mile length, height, width, depth, breadth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from edge, perimeter area, covers</p>	<p>mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/lightest kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales</p>

	square centimetre (cm ²), square metre (m ²), square millimetre (mm ²) ruler metre stick, tape measure	
CAPACITY AND VOLUME	TEMPERATURE	TIME
litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container, measuring cylinder pint, gallon	temperature degree centigrade Celsius	time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, leap year, century, millennium birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last noon, midnight calendar, date, date of birth

		<p>now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals</p>
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		12-hour clock time, 24-hour clock time
MONEY	PROPERTIES OF SHAPE	2D SHAPE
<p>money</p> <p>coin</p> <p>penny, pence, pound</p> <p>price, cost</p> <p>buy, bought, sell, sold</p> <p>spend, spent</p> <p>pay</p> <p>change</p> <p>dear, costs more</p> <p>cheap, costs less, cheaper</p> <p>costs the same as</p> <p>how much ...?</p> <p>how many ...?</p> <p>total</p> <p>discount</p> <p>currency</p>	<p>shape, pattern</p> <p>flat, line</p> <p>curved, straight</p> <p>round</p> <p>hollow, solid</p> <p>sort</p> <p>make, build, construct, draw, sketch</p> <p>perimeter</p> <p>centre, radius, diameter</p> <p>surface</p> <p>angle, right-angled</p> <p>congruent</p> <p>base, square-based</p> <p>size</p> <p>bigger, larger, smaller</p> <p>symmetry, symmetrical, symmetrical</p> <p>pattern</p> <p>line symmetry</p> <p>reflect, reflection</p> <p>axis of symmetry, reflective symmetry</p>	<p>2-D, two-dimensional</p> <p>corner, side</p> <p>point, pointed</p> <p>rectangle (including square), rectangular, oblong</p> <p>rectilinear</p> <p>circle, circular</p> <p>triangle, triangular</p> <p>equilateral triangle, isosceles triangle, scalene triangle</p> <p>pentagon, pentagonal</p> <p>hexagon, hexagonal</p> <p>heptagon</p> <p>octagon, octagonal</p> <p>quadrilateral</p> <p>parallelogram, rhombus, trapezium</p> <p>polygon</p> <p>right-angled</p> <p>parallel, perpendicular</p> <p>x-axis, y-axis, quadrant</p>

	pattern, repeating pattern match regular, irregular	
3D SHAPE	POSITION AND DIRECTION	
3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron octahedron	position over, under, underneath above, below top, bottom, side on, in, outside, inside around in front, behind front, back beside, next to opposite, apart, between middle, edge centre corner direction journey, route left, right, up, down higher, lower forwards, backwards, sideways across next to, close, near, far	

along
through
to, from, towards, away from
clockwise, anticlockwise
compass point
north, south, east, west, N, S, E, W
north-east, north-west, south-east,
south-west, NE, NW, SE, SW
horizontal, vertical, diagonal
translate, translation
coordinate
movement
slide, roll, turn, stretch, bend
whole turn, half turn, quarter turn,
three-quarter turn
rotate, rotation
angle, is a greater/smaller angle than
degree
right angle, acute angle, obtuse angle
reflection
straight line
ruler, set square
angle measurer, compass, **protractor**

STATISTICS	GENERAL
<p>count, tally, sort, vote survey, questionnaire, data, database graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table, bar line chart Carroll diagram, Venn diagram line graph label, title, axis, axes diagram most popular, most common least popular, least common maximum/minimum value outcome</p>	<p>pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation, written calculation statement justify make a statement explain your reasoning</p>

YEAR 6 MATHS Curriculum Overview

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
	<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit</p> <p>Round any whole number to a required degree of accuracy</p> <p>Use negative numbers in context, and calculate intervals across zero</p> <p>Solve number and practical problems that involve the above</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Solve problems involving addition, subtraction, multiplication and division</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy</p>	<p>Identify common factors, common multiples and prime numbers</p> <p>Multiply multi-digit numbers up to four digits by a 2-digit whole number using the formal written method of long multiplication</p> <p>Perform mental calculations, including with mixed operations and large numbers</p> <p>Divide numbers up to four digits by a 2-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations</p> <p>Use common factors to simplify fractions; use common multiples to express</p>	<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found</p> <p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p> <p>Use simple formulae</p> <p>Generate and describe linear number sequences</p>	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</p> <p>Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</p> <p>Compare and order fractions, including fractions >1</p> <p>Solve problems involving the calculation of percentages and the use of percentages for comparison</p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa</p>	<p>Draw given angles, and measure them in degrees ($^{\circ}$) (Y5)</p> <p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles (Y5)</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p> <p>Draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets</p> <p>Describe positions on the full coordinate grid (all four quadrants)</p>	<p>Consolidation</p>

		<p>fractions in the same denomination</p> <p>Compare and order fractions, including fractions > 1</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p> <p>Identify common factors, common multiples and prime numbers</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Solve problems involving addition, subtraction, multiplication and division</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Y5)</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form</p>	<p>Find pairs of numbers that satisfy an equation with two unknowns</p> <p>Enumerate possibilities of combinations of two variables</p> <p>Express missing number problems algebraically</p> <p>Find pairs of numbers that satisfy an equation with two unknowns</p> <p>Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places</p> <p>Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy</p>	<p>Recognise when it is possible to use formulae for area and volume of shapes</p> <p>Calculate the area of parallelograms and triangles</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units</p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs (Y4)</p> <p>Interpret and construct pie charts and line graphs and use these to solve problems</p> <p>Calculate and interpret the mean as an average</p>	<p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes</p>	
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		<p>Divide proper fractions by whole numbers</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p> <p>Solve problems involving addition, subtraction, multiplication and division</p> <p>Associate a fraction with division and calculate decimal fraction equivalents</p> <p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate</p> <p>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Multiply 1-digit numbers with up to 2 decimal places by whole numbers</p> <p>Use written division methods in cases where the answer has up to 2 decimal places</p> <p>Solve problems involving addition, subtraction, multiplication and division</p>			
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<u>TIMES</u> <u>TABLE</u> <u>OBJECTIVE</u>	Year 6 children should now be secure in all times tables and children who did not meet end of Year 4 expectations should now have been accelerated to be secure. Lesson starters will use mixed multiplication/division facts.
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Year 6 Medium-Term Plan

Term	Week number	Learning Objective
Autumn 1	Week 1	Autumn Block 1 - Place Value
	Week 2	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit Round any whole number to a required degree of accuracy Use negative numbers in context, and calculate intervals across zero Solve number and practical problems that involve the above
	Week 3	Autumn Block 2 - Addition, Subtraction, Multiplication and Division
	Week 4	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
	Week 5	Solve problems involving addition, subtraction, multiplication and division
	Week 6	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
Autumn 2	Week 1	Identify common factors, common multiples and prime numbers Multiply multi-digit numbers up to four digits by a 2-digit whole number using the formal written method of long multiplication Perform mental calculations, including with mixed operations and large numbers Divide numbers up to four digits by a 2-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context Use their knowledge of the order of operations to carry out calculations involving the four operations
	Week 2	Autumn Block 3 - Fractions A
	Week 3	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions > 1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Identify common factors, common multiples and prime numbers Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division
	Week 4	Autumn Block 4 - Fractions B
	Week 5	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Y5) Multiply simple pairs of proper fractions, writing the answer in its simplest form Divide proper fractions by whole numbers Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Solve problems involving addition, subtraction, multiplication and division Associate a fraction with division and calculate decimal fraction equivalents

	Week 6	<p><u>Autumn Block 5 - Converting Units</u> Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places</p>
Spring 1	Week 1	<p><u>Spring Block 1 - Ratio</u> Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p>
	Week 2	
	Week 3	<p><u>Spring Block 2 - Algebra</u> Use simple formulae Generate and describe linear number sequences Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns</p>
	Week 4	
	Week 5	<p><u>Spring Block 3 - Decimals</u> Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places Solve problems which require answers to be rounded to specified degrees of accuracy Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Multiply 1-digit numbers with up to 2 decimal places by whole numbers Use written division methods in cases where the answer has up to 2 decimal places Solve problems involving addition, subtraction, multiplication and division</p>
	Week 6	
Spring 2	Week 1	<p><u>Spring Block 4 - Fractions, Decimals and Percentages</u> Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Compare and order fractions, including fractions >1 Solve problems involving the calculation of percentages and the use of percentages for comparison</p>
	Week 2	

	Week 3	<u>Spring Block 5 - Area, Perimeter and Volume</u> Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units
	Week 4	
	Week 5	<u>Spring Block 6 - Statistics</u> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs (Year 4) Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average
	Week 6	
Summer 1	Week 1	<u>Summer Block 1 - Shape</u> Draw given angles, and measure them in degrees (°) (Y5) Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles (Y5) Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets
	Week 2	
	Week 3	
	Week 4	<u>Summer Block 2 - Position and Direction</u> Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
	Week 5	<u>Themed Projects, Consolidation and Problem Solving</u>
	Week 6	
Summer 2	Week 1	
	Week 2	
	Week 3	
	Week 4	
	Week 5	
	Week 6	

Year 6 Maths Vocabulary

Words in red denote new vocabulary for the year group

NUMBER	PLACE VALUE	ESTIMATING
number	ones	guess
numeral	tens, hundreds	how many
zero	digit	estimate
one, two, three ... twenty	one-, two- or three-digit number	nearly
teens numbers, eleven, twelve ...	place, place value	roughly
twenty	stands for, represents	close to
twenty-one, twenty-two ... one	exchange	approximate, approximately
hundred, two hundred ... one	the same number as, as many as	about the same as
thousand ... ten thousand, hundred	more, larger, bigger, greater	just over, just under
thousand, million	fewer, smaller, less	exact, exactly
none	fewest, smallest, least	too many, too few
how many ...?	most, biggest, largest, greatest	enough, not enough
count, count (up) to, count on (from, to),	one more, ten more, one hundred more, one thousand more	round, nearest, round to the nearest
count back (from, to)	one less, ten less, one hundred less, one thousand less	ten, hundred, thousand, ten thousand
forwards, backwards	equal to	round up, round down
count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on	compare	
to hundreds, thousands	order	
equal to, equivalent to	size	
	first, second, third ... twentieth	

is the same as more, less most, least tally many odd, even multiple of, factor of factor pair sequence continue predict few pattern pair, rule relationship next, consecutive > greater than < less than ≥ greater than or equal to ≤ less than or equal to Roman numerals integer, positive, negative above/below zero, minus negative numbers	twenty-first, twenty-second ... last, last but on before, after next between halfway between above, below	
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<p>formula divisibility square number prime number factorise prime factor ascending/descending order digit total</p>		
<p>ADDITION AND SUBTRACTION</p>	<p>MULTIPLICATION AND DIVISION</p>	<p>FRACTIONS</p>
<p>addition add, more, and, make, sum, total altogether double, near double half, halve one more, two more... ten more... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less</p>	<p>multiplication, multiply multiplied by multiple, factor groups of times, product once, twice, three times ... ten times repeated addition division, dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens</p>	<p>Fraction, proper/improper fraction equivalent fraction mixed number numerator, denominator equivalent, reduced to, cancel equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts</p>

<p>how many fewer is ... than ...? how much less is ...? difference between equals, is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary, ones boundary, tenths boundary inverse</p>	<p>equal groups of doubling, halving array, row, column number patterns multiplication table multiplication fact, division fact inverse square, squared, cube, cubed</p>	<p>sixths, sevenths, eighths, tenths ...hundredths, thousandths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion, in every, for every ratio percentage, per cent, %</p>
<p>ALGEBRA</p>	<p>MEASUREMENT</p>	<p>LENGTH</p>
<p>formula formulae equation unknown variable</p>	<p>measure measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly</p>	<p>millimetre, centimetre, metre, kilometre, mile yard, foot, feet, inch, inches length, height, width, depth, breadth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close</p>

	just over, just under	distance apart ... between ... to ... from edge, perimeter, circumference area, covers square centimetre (cm ²), square metre (m ²), square millimetre (mm ²) ruler metre stick, tape measure
WEIGHT	CAPACITY AND VOLUME	TEMPERATURE
mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/lightest tonne pound ounce kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales	litre, half litre, millilitre centilitre, cubic centimetres(cm³), cubic metres (m³), cubic millimetres (mm³), cubic kilometres (km³) capacity volume full empty more than less than half full quarter full holds, contains container, measuring cylinder pint, gallon	temperature degree centigrade Celsius

TIME	MONEY	PROPERTIES OF SHAPE
time	money	shape, pattern
days of the week, Monday, Tuesday	coin	flat, line
...	penny, pence, pound	curved, straight
months of the year (January, February ...)	price, cost	round
seasons: spring, summer, autumn, winter	buy, bought, sell, sold	hollow, solid
day, week, weekend, fortnight, month, year, leap year, century, millennium	spend, spent	sort
birthday, holiday	pay	make, build, construct, draw, sketch
morning, afternoon, evening, night	change	perimeter
bedtime, dinner time, playtime	dear, costs more	centre, radius, diameter
today, yesterday, tomorrow	cheap, costs less, cheaper	circumference, concentric, arc
before, after	costs the same as	net, open, closed
earlier, later	how much ...?	surface
next, first, last	how many ...?	angle, right-angled
noon, midnight	total	congruent
calendar, date, date of birth	discount	intersecting, intersection
now, soon, early, late, earliest, latest	currency	plane
quick, quicker, quickest, quickly	profit, loss	base, square-based
slow, slower, slowest, slowly		size
old, older, oldest		bigger, larger, smaller
		symmetry, symmetrical, symmetrical
		pattern
		line symmetry
		reflect, reflection

<p>new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals 12-hour clock time, 24-hour clock time Greenwich Mean Time, British Summer Time, International Date Line</p>		<p>axis of symmetry, reflective symmetry pattern, repeating pattern match regular, irregular</p>
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2D SHAPE	3D SHAPE	POSITION AND DIRECTION
2-D, two-dimensional corner, side point, pointed rectangle (including square), rectangular, oblong rectilinear circle, circular triangle, triangular equilateral triangle, isosceles triangle, scalene triangle pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal quadrilateral parallelogram, rhombus, trapezium kite polygon right-angled parallel, perpendicular x-axis, y-axis, quadrant	3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron octahedron dodecahedron net, open, closed	position over, under, underneath above, below top, bottom, side on, in, outside, inside around in front, behind front, back beside, next to opposite, apart, between middle, edge centre corner direction journey, route left, right, up, down higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from

		<p>clockwise, anticlockwise compass point north, south, east, west, N, S, E, W north-east, north-west, south-east, south-west, NE, NW, SE, SW horizontal, vertical, diagonal translate, translation coordinate movement slide, roll, turn, stretch, bend whole turn, half turn, quarter turn, three-quarter turn rotate, rotation angle, is a greater/smaller angle than degree right angle, acute angle, obtuse angle reflex angle reflection straight line ruler, set square angle measurer, compass, protractor</p>
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STATISTICS	GENERAL
<p>count, tally, sort, vote survey, questionnaire, data, database graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table, bar line chart Carroll diagram, Venn diagram line graph pie chart label, title, axis, axes diagram most popular, most common least popular, least common maximum/minimum value outcome mean (mode, median, range as estimates for this) statistics, distribution</p>	<p>pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation, written calculation statement justify make a statement explain your reasoning</p>

Progression in MATHS

	<u>EYFS</u>	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>YEAR 6</u>
Number & Place Value	Understanding of numbers to 10	Ma1/2.1a count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	Ma2/2.1a count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward	Ma3/2.1a count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Ma4/2.1a count in multiples of 6, 7, 9, 25 and 1,000	Ma5/2.1a read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	Ma6/2.1a read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
	Count numbers to 20	Ma1/2.1b count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s	Ma2/2.1b recognise the place value of each digit in a two-digit number (10s, 1s)	Ma3/2.1b recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)	Ma4/2.1b find 1,000 more or less than a given number	Ma5/2.1b count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000	Ma6/2.1b round any whole number to a required degree of accuracy
	Given a number, identify 1 more and 1 less	Ma1/2.1c given a number, identify 1 more and 1 less	Ma2/2.1c identify, represent and estimate numbers using different representations, including the number line	Ma3/2.1c compare and order numbers up to 1,000	Ma4/2.1c count backwards through 0 to include negative numbers	Ma5/2.1c interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0	Ma6/2.1c use negative numbers in context, and calculate intervals across 0
	Subitise to 5 (recognising quantities without counting)	Ma1/2.1d identify and represent numbers using objects and pictorial representations including the number	Ma2/2.1d compare and order numbers from 0 up to 100; use <, > and = signs	Ma3/2.1d identify, represent and estimate numbers using different representations	Ma4/2.1d recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s and 1s)	Ma5/2.1d round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	Ma6/2.1d solve number and practical problems that involve all of the above.

		line, and use the language of: equal to, more than, less than (fewer), most, least					
Number recognition and formation to 10	Ma1/2.1e read and write numbers from 1 to 20 in numerals and words.	Ma2/2.1e read and write numbers to at least 100 in numerals and in words	Ma3/2.1e read and write numbers up to 1,000 in numerals and in words	Ma4/2.1e order and compare numbers beyond 1,000	Ma5/2.1e solve number problems and practical problems that involve all of the above		
		Ma2/2.1f use place value and number facts to solve problems.	Ma3/2.1f solve number problems and practical problems involving these ideas.	Ma4/2.1f identify, represent and estimate numbers using different representations	Ma5/2.1f read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.		
				Ma4/2.1g round any number to the nearest 10, 100 or 1,000			
				Ma4/2.1h solve number and practical problems that involve all of the above and with increasingly large positive numbers			
				Ma4/2.1i read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value.			

<p>Addition & Subtraction</p> <p>(Addition, Subtraction, Multiplication and Division in Year 6)</p>	<p>Ma1/2.2a read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p>	<p>Ma2/2.2a solve problems with addition and subtraction:</p> <ul style="list-style-type: none"> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods 	<p>Ma3/2.2a add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> • a three-digit number and 1s • a three-digit number and 10s • a three-digit number and 100s 	<p>Ma4/2.2a add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p>	<p>Ma5/2.2a add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p>	<p><i>In Y6, skills 2.2a to 2.2c and 2.2e are multiplication and division skills so have been placed below.</i></p>
	<p>Ma1/2.2b represent and use number bonds and related subtraction facts within 20</p>	<p>Ma2/2.2b recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>	<p>Ma3/2.2b add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction</p>	<p>Ma4/2.2b estimate and use inverse operations to check answers to a calculation</p>	<p>Ma5/2.2b add and subtract numbers mentally with increasingly large numbers</p>	
	<p>Ma1/2.2c add and subtract one-digit and two-digit numbers to 20, including 0</p>	<p>Ma2/2.2c add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> - a two-digit number and 1s - a two-digit number and 10s 	<p>Ma3/2.2c estimate the answer to a calculation and use inverse operations to check answers</p>	<p>Ma4/2.2c solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Ma5/2.2c use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p>	

			<ul style="list-style-type: none"> - 2 two-digit numbers - adding 3 one-digit numbers 				
		<p>Ma1/2.2d solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$.</p>	<p>Ma2/2.2d show that addition of 2 numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>			<p>Ma5/2.2d solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Ma6/2.2d perform mental calculations, including with mixed operations and large numbers.</p>
			<p>Ma2/2.2e recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Ma3/2.2e solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>			
							<p>Ma6/2.2f use their knowledge of the order of operations to carry out calculations involving the 4 operations</p>
							<p>Ma6/2.2g solve addition and subtraction multi-step problems in contexts, deciding which operations</p>

							and methods to use and why
							Ma6/2.2h solve problems involving addition, subtraction, multiplication and division
							Ma6/2.2i use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Multiplication & Division		Ma1/2.3a 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.	Ma2/2.3a recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	Ma3/2.3a recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Ma4/2.3a recall multiplication and division facts for multiplication tables up to 12×12	Ma5/2.3a identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	Ma6/2.2a multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
			Ma2/2.3b calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times),	Ma3/2.3b write and calculate mathematical statements for multiplication and division using the multiplication tables that they know,	Ma4/2.3b use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1;	Ma5/2.3b know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	Ma6/2.2b divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and

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			division (\div) and equals (=) signs	including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	multiplying together 3 numbers		interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
			Ma2/2.3c show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot	Ma3/2.3c solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	Ma4/2.3c recognise and use factor pairs and commutativity in mental calculations	Ma5/2.3c establish whether a number up to 100 is prime and recall prime numbers up to 19	Ma6/2.2c divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
			Ma2/2.3d solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.		Ma4/2.3d multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Ma5/2.3d multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	
					Ma4/2.3e solve problems involving multiplying and adding, including using the	Ma5/2.3e multiply and divide numbers mentally drawing upon known facts	Ma6/2.2e identify common factors, common multiples and prime numbers

					distributive law to multiply two digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.		
						Ma5/2.3f divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	
						Ma5/2.3g multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000	
						Ma5/2.3h recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	

						<p>Ma5/2.3i solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</p>	
						<p>Ma5/2.3j solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p>	
						<p>Ma5/2.3k solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p>	
Fractions		<p>Ma1/2.4a recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity</p>	<p>Ma2/2.4a recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity</p>	<p>Ma3/2.4a count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing</p>	<p>Ma4/2.4a recognise and show, using diagrams, families of common equivalent fractions</p>	<p>Ma5/2.4a compare and order fractions whose denominators are all multiples of the same number</p>	<p>Ma6/2.3a use common factors to simplify fractions; use common multiples to express fractions in the same denomination</p>

				one-digit numbers or quantities by 10			
		Ma1/2.4b recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.	Ma2/2.4b write simple fractions, for example $1/2$ of $6 = 3$ and recognise the equivalence of $2/4$ and $1/2$.	Ma3/2.4b recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Ma4/2.4b count up and down in hundredths; recognise that hundredths arise when dividing an object by a 100 and dividing tenths by 10.	Ma5/2.4b identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	Ma6/2.3b compare and order fractions, including fractions > 1
				Ma3/2.4c recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Ma4/2.4c solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	Ma5/2.4c recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number e.g. $2/5 + 4/5 = 6/5 = 1$ and $1/5$	Ma6/2.3c add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
				Ma3/2.4d recognise and show, using diagrams, equivalent fractions with small denominators	Ma4/2.4d add and subtract fractions with the same denominator	Ma5/2.4d add and subtract fractions with the same denominator and denominators that are multiples of the same number	Ma6/2.3d multiply simple pairs of proper fractions, writing the answer in its simplest form
				Ma3/2.4e add and subtract fractions with the same denominator within one whole	Ma4/2.4e recognise and write decimal equivalents of any number of	Ma5/2.4e multiply proper fractions and mixed numbers by whole numbers,	Ma6/2.3e divide proper fractions by whole numbers

				tenths or hundredths	supported by materials and diagrams	
			Ma3/2.4f compare and order unit fractions, and fractions with the same denominators	Ma4/2.4f recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$	Ma5/2.4f read and write decimal numbers as fractions e.g. $0.71 = \frac{71}{100}$	Ma6/2.3f associate a fraction with division and calculate decimal equivalents for a simple fraction.
			Ma3/2.4g solve problems that involve all of the above.	Ma4/2.4g find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Ma5/2.4g recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Ma6/2.3g identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers are up to three decimal places
				Ma4/2.4h round decimals with 1 decimal place to the nearest whole number	Ma5/2.4h round decimals with 2 decimal places to the nearest whole number and to 1 decimal place	Ma6/2.3h multiply one-digit numbers with up to 2 decimal places by whole numbers
				Ma4/2.4i compare numbers with the same number of decimal places up to 2 decimal places	Ma5/2.4i read, write, order and compare numbers with up to 3 decimal places	Ma6/2.3i use written division methods in cases where the answer has up to 2 decimal places

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					<p>Ma4/2.4j solve simple measure and money problems involving fractions and decimals to 2 decimal places</p>	<p>Ma5/2.4j solve problems involving number up to 3 decimal places</p>	<p>Ma6/2.3j solve problems which require answers to be rounded to specified degrees of accuracy</p>
						<p>Ma5/2.4k recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction</p>	<p>Ma6/2.3k recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>
						<p>Ma5/2.4l solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and fractions with a denominator of a multiple of 10 or 25.</p>	

Proportion & Ratio							Ma6/2.4a solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
							Ma6/2.4b solve problems involving the calculation of percentages and the use of percentages for comparison
							Ma6/2.4c solve problems involving similar shapes where the scale factor is known or can be found
							Ma6/2.4d solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra							Ma6/2.5a use simple formulae
							Ma6/2.5b generate and describe linear number sequences
							Ma6/2.5c express missing number problems algebraically
							Ma6/2.5d find pairs of numbers that satisfy an equation with two unknowns
							Ma6/2.5e enumerate possibilities of combinations of 2 variables.
Measurement		Ma1/3.1a compare, describe and solve practical problems for: - lengths and heights e.g. long / short, longer / shorter, tall / short, double / half - mass / weight e.g. heavy, light,	Ma2/3.1a choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	Ma3/3.1a measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Ma4/3.1a convert between different units of measure	Ma5/3.1a convert between different units of metric measure e.g. km and m, cm and m, cm and mm, g and kg, l and ml	Ma6/3.1a solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places where appropriate

		<p>heavier than, lighter than</p> <ul style="list-style-type: none"> - capacity and volume e.g. full, empty, more than, less than, quarter - time e.g. quicker, slower, earlier, later 					
		<p>Ma1/3.1b measure and begin to record the following:</p> <ul style="list-style-type: none"> - lengths and heights - mass/weight - capacity and volume - time (hours, minutes, seconds) 	<p>Ma2/3.1b compare and order lengths, mass, volume/capacity and record the results using >, < and =</p>	<p>Ma3/3.1b measure the perimeter of simple 2-D shapes</p>	<p>Ma4/3.1b measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p>	<p>Ma5/3.1b understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</p>	<p>Ma6/3.1b use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places</p>
		<p>Ma1/3.1c recognise and know the value of different denominations of coins and notes</p>	<p>Ma2/3.1c recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p>	<p>Ma3/3.1c add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>Ma4/3.1c find the area of rectilinear shapes by counting squares</p>	<p>Ma5/3.1c measure and calculate the perimeter of composite rectilinear shapes</p>	<p>Ma6/3.1c convert between miles and kilometres</p>

						in centimetres and metres	
		<p>Ma1/3.1d sequence events in chronological order using language e.g. <i>before and after, next, first today, yesterday, tomorrow, morning, afternoon and evening</i></p>	<p>Ma2/3.1d find different combinations of coins that equal the same amounts of money</p>	<p>Ma3/3.1d tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p>	<p>Ma4/3.1d estimate, compare and calculate different measures, including money in pounds and pence</p>	<p>Ma5/3.1d calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p>	<p>Ma6/3.1d recognise that shapes with the same areas can have different perimeters and vice versa</p>
		<p>Ma1/3.1e recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>Ma2/3.1e solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>Ma3/3.1e estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p>	<p>Ma4/3.1e read, write and convert time between analogue and digital 12 and 24-hour clocks</p>	<p>Ma5/3.1e estimate volume e.g. <i>using 1cm³ blocks to build cuboids (including cubes)</i> and capacity e.g. <i>using water</i></p>	<p>Ma6/3.1e recognise when it is possible to use formulae for area and volume of shapes</p>
		<p>Ma1/3.1f tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p>	<p>Ma2/3.1f compare and sequence intervals of time</p>	<p>Ma3/3.1f know the number of seconds in a minute and the number of days in each month, year and leap year</p>	<p>Ma4/3.1f solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.</p>	<p>Ma5/3.1f solve problems involving converting between units of time</p>	<p>Ma6/3.1f calculate the area of parallelograms and triangles</p>

			Ma2/3.1g tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	Ma3/3.1g compare durations of events e.g. calculate the time taken by particular events or tasks		Ma5/3.1g use all four operations to solve problems involving measure using decimal notation including scaling. e.g. length, mass, volume, money	Ma6/3.1g calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units e.g. mm ³ and km ³
			Ma2/3.1h know the number of minutes in an hour and the number of hours in a day				
Properties of Shapes		Ma1/3.2a recognise and name common 2-D and 3-D shapes, including: - rectangles (including squares), circles and triangles - cuboids (including cubes), pyramids and spheres	Ma2/3.2a identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	Ma3/3.2a draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Ma4/3.2a compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Ma5/3.2a identify 3-D shapes, including cubes and other cuboids, from 2-D representations	Ma6/3.2a draw 2-D shapes using given dimensions and angles
			Ma2/3.2b identify and describe the properties of 3-D shapes,	Ma3/3.2b recognise angles as a property of shape	Ma4/3.2b identify acute and obtuse angles and	Ma5/3.2b know angles are measured in	Ma6/3.2b recognise, describe and build simple 3-

			including the number of edges, vertices and faces	or a description of a turn	compare and order angles up to 2 right angles by size	degrees: estimate and compare acute, obtuse and reflex angles	D shapes, including making nets
			Ma2/3.2c identify 2-D shapes on the surface of 3-D shapes <i>e.g. a circle on a cylinder, a triangle on a pyramid</i>	Ma3/3.2c identify right angles, recognise that 2 right angles make a half-turn, 3 make three quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle	Ma4/3.2c identify lines of symmetry in 2-D shapes presented in different orientations	Ma5/3.2c draw given angles, and measure them in degrees (o)	Ma6/3.2c compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
			Ma2/3.2d compare and sort common 2-D and 3-D shapes and everyday objects.	Ma3/3.2d identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	Ma4/3.2d complete a simple symmetric figure with respect to a specific line of symmetry.	Ma5/3.2d identify: <ul style="list-style-type: none"> • angles at a point and 1 whole turn (total 360o) • angles at a point on a straight line and half a turn (total 180o) • other multiples of 90o 	Ma6/3.2d illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
						Ma5/3.2e use the properties of rectangles to deduce related	Ma6/3.2e recognise angles where they meet at a point, are on a

						facts and find missing lengths and angles	straight line, or are vertically opposite, and find missing angles.
						Ma5/3.2f distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	
Position and Direction		Ma1/3.3a describe position, directions and movements, including whole, half, quarter and three-quarter turns.	Ma2/3.3a order and arrange combinations of mathematical objects in patterns and sequences		Ma4/3.3a describe positions on a 2-D grid as coordinates in the first quadrant	Ma5/3.3a identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Ma6/3.3a describe positions on the full coordinate grid (all 4 quadrants)
			Ma2/3.3b use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).		Ma4/3.3b describe movements between positions as translations of a given unit to the left/right and up/down		Ma6/3.3b draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

					Ma4/3.3c plot specified points and draw sides to complete a given polygon.		
Statistics			Ma2/4.1a interpret and construct simple pictograms, tally charts, block diagrams and tables	Ma3/4.1a interpret and present data using bar charts, pictograms and tables	Ma4/4.1a interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Ma5/4.1a solve comparison, sum and difference problems using information presented in a line graph	Ma6/4.1a interpret and construct pie charts and line graphs and use these to solve problems
			Ma2/4.1b ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	Ma3/4.1b solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables. e.g. 'How many more?' and 'How many fewer?'	Ma4/4.1b solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Ma5/4.1b complete, read and interpret information in tables, including timetables.	Ma6/4.1b calculate and interpret the mean as an average.
			Ma2/4.1c ask and answer questions about totalling and comparing categorical data.				

What will MATHS look like in the classroom?

THE WEEK'S LESSONS

Monday	Tuesday	Wednesday	Thursday	Friday
Teaching from curriculum sequence				Assess and revisit Times Tables

Main Maths Lessons

Maths lessons in the mornings last for 45 minutes. From Monday to Thursday, morning lessons are taught to follow the unit shown on the medium-term plans. Friday's lesson is an assess and revisit lesson with a key focus on Times Tables in Year 3 and Year 4.

Assess

During this lesson, a short informal 'low-stakes' assessment (of no more than three questions) takes place to give an indication of the child's understanding of the skills learned from that week.

Recap

Following the assessment, children will work on core skills learned in previous weeks. This enables knowledge to stay 'fresh' in the children's memory and ensure that core skills are embedded securely for use in other contexts.

During this assess and revise lesson, the class Times Table will be assessed using a standard test.

Daily Arithmetic

Key arithmetic skills are practised and recapped in a daily arithmetic lesson separate from the main maths lesson. In Years 1-4, these are based on the NCETM Mastering Number scheme and in Years 5-6 the lessons are based on the Testbase Core Arithmetic assessments. Emphasis in these lessons is given to repeated practice and skill rehearsal to ensure fluency and rapid recall when using and applying skills in a variety of contexts.

TIMES TABLES

In Years 1-5, each daily maths lesson begins with a three minute times table starter. This is based on the times table (or 'counting in' skill below Year 2) target for each term, as detailed in each year group's curriculum overview (see p11, p21, p33, p45).

This activity will take the form of chanting the times table (research has shown this to be the most impactful method), although visual representations should initially be used with Year 1 and Year 2 children, such as grouping objects in arrays as below:



$$1 \times 3 = 3$$

Showing 1 group of 3 is worth 3



$$4 \times 3 = 12$$

Showing 4 groups of 3 is worth 12



$$7 \times 3 = 21$$

Showing 7 groups of 3 is worth 21

Arrays using dots should also be used to represent times tables to make links with the method used for multiplication in Year 1 and 2.

Children in KS2 should be supported initially with the times table written on the board or screen, then removing some to encourage recall.

Times tables should be chanted as “one 2 is 2, two 2s are 4, three 2s are 6, four 2s are 8”. This enables to children to chant in a rhythm and research shows that this impacts positively on memorising each fact.

The key to learning times tables effectively is repetition. This means that the starter activity to each maths lesson will be identical or very similar to the previous day's starter.

Other activities can be used, such as songs or games. However, these should only be used to further embed facts when the times table has been sufficiently learned through chanting.

Once children are secure in saying the times table in order, they should then be given verbal questions out of table order, e.g.:

“What are six 2s?”

“What is 9 x 2?”

“What are three lots of 2?”

“What is the product of 5 and 2?”

As shown in the example above, question language should be varied to encourage flexibility.

When children are secure in answering times table question out of order, they should then also practise related division facts, e.g.:

“How many 2s make 18?”

“If 14 is the answer, what is the question?”

“What is 8 divided by 2?”

While speed of recall is important once a times table has been initially learned, children should be given reasonable recall and thinking time during the initial learning stage. Some children will recall facts more quickly than others and it is vital that other children do not get left behind during this process.

MAIN LESSON

Children are taught using clear modelling of methods and skills by the teacher. These explanations are frequent throughout the lesson and will be modelled at various times. For example, children may complete half of the independent tasks and then the teacher will model skills for the next set of questions. The lesson format is fluid with time allotted to each part is based on the teacher's dynamic assessment during that lesson.

The lesson format follows a pattern of "I do, we do, you do."

I do

The teacher models and explains the method or key skill, showing how this can be used to complete a task

We do

Monitored by the adult teaching team, the children complete an example task to practice together and demonstrate understanding. This provides the teacher with an AfL opportunity, to identify children who are ready to complete independent work and who may need extra support. This leads to flexible grouping within each lesson and aims to meet the needs of every learner.

You do

Children complete tasks using the skill modelled by the teacher.

Children work either individually on tasks, or in pairs or small groups. Tasks are matched to the year group objective being learned and all children are taught to achieve this objective. Scaffolded support is provided for those working below age-related expectations and challenge is given to those working above age-related expectations using problem-solving and reasoning tasks. Children working significantly below age-related expectations will work towards similar stage-appropriate objectives. The "Ready To Progress" documents provide a structure for teaching children working significantly below age-related expectations and ensures that key core skills are learned in order and built on sequentially.

Daily Maths lessons will consist of a variation of independent tasks which will initially focus on fluency skills or key methods, moving into problem-solving and reasoning tasks. It is an expectation that all children will access these regularly.

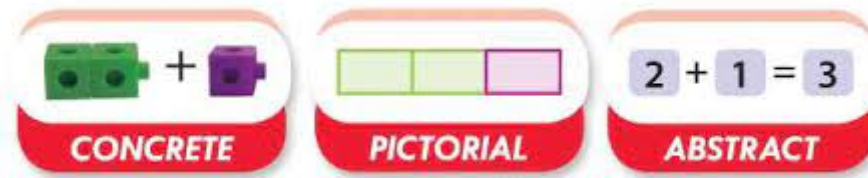
Challenge for higher attaining children

Challenge activities are placed in the classroom to be easily accessed without the need to ask an adult to ensure that no learning time is wasted. In some lessons, there may be a need for individual children to have further practice of fluency key skills and may not be ready to use these skills in a reasoning context.

There may also be occasions where a Maths lesson is used to recap, embed or clarify misconceptions that have been identified by the class teacher and this may affect the structure of the lesson.

CONCRETE, PICTORIAL, ABSTRACT

Children will use **concrete**, **pictorial** and **abstract** methods of calculation.



Concrete is the 'doing' stage – physically moving objects to explore a concept. This helps bring the maths to life. Every abstract concept is first introduced using physical, concrete objects.

When learning a new concept, **concrete** materials and objects are used to aid calculation. For example, Numicon is used in EYFS to learn numbers to 10, number bonds to ten and whether each number is odd or even. A number sentence is written to record the question and answer calculated. In the example image above, one cube has been added to two cubes to show the calculation of $2 + 1 = 3$.

Pictorial methods use images to represent the **concrete** materials. This stage encourages children to make a mental connection between the physical object they just handled and the abstract pictures, diagrams or models that represent the objects from the problem. Building or drawing a model makes it easier for children to grasp difficult abstract concepts (for example, fractions). Simply put, it helps children visualise abstract problems and make them more accessible.

These methods bridge the gap between **concrete** and **abstract** methods. In the example image above, the cubes from the **concrete** method have become coloured squares. Two green squares are combined with one purple square to represent $2 + 1 = 3$. A number sentence is written to record the question and answer calculated.

The **abstract** stage uses only symbols and numerals to model the problem or calculation. The teacher uses operational symbols (+, −, ×, ÷) to indicate addition, subtraction, multiplication or division.

PRESENTATION AND MARKING

Children complete most tasks in the White Rose Maths booklets. Challenge activities are completed on squared paper and slotted into the booklet.

When writing on squared pages, children write numbers using one digit per



square, e.g.:

When writing fractions, the whole fraction is written in one square.

Decimal points are placed on the line between squares.

Marking is done mainly within the lesson, following the school marking policy. Correct answers are ticked with green ink and errors are indicated with orange ink. Children then use red ink for corrections. If children self-correct errors, purple ink is used to show independent alterations.

Due to this 'instant feedback', misconceptions are identified rapidly and intervention can be given within the lesson itself. Where there are misconceptions that require more dedicated time, interventions may take place after the lesson.

Assessment

Children are assessed in the following ways:

- A short, 'low-stakes' formative assessment typically on Friday to assess the week's learning. This is done informally using a small number of key questions set by the teacher to identify gaps in understanding. These gaps can then be worked on in the Friday recap session.
- In each term, a formal assessment using Testbase takes place which are based on the term's learning and are focused on the key objectives for the unit studied. These assessments *inform* teacher judgement and each child's assessment is based on a combination of these tests, their work during lessons and the teacher's in-depth knowledge of the child. Teacher judgements are recorded on SIMS and Pupil Progress meetings then identify children at risk of not making good progress or achieving age-related expectations. Support is then put in place for these children.

SEN

At St Bartholomew's, we provide learning opportunities that enable all pupils to make good progress. Every child has an equal right to receive the maths curriculum in daily maths lessons of approximately one hour. There may be times when it is more appropriate for Foundation Stage or Key Stage 1 sessions to be approximately 45 minutes in length and for Key Stage 2 sessions to be over an hour. All children will have their specific needs met through differentiated work in conjunction with targets. Teacher or TA support time is planned for and provided in relation to identified needs for individuals and groups.

Monitoring and review

The phase leaders, alongside the maths leader and SLT, are responsible for monitoring and evaluating curriculum progress. This is done through book scrutiny, planning scrutiny, lesson observations, pupil interviews, staff discussions and audit of resources.