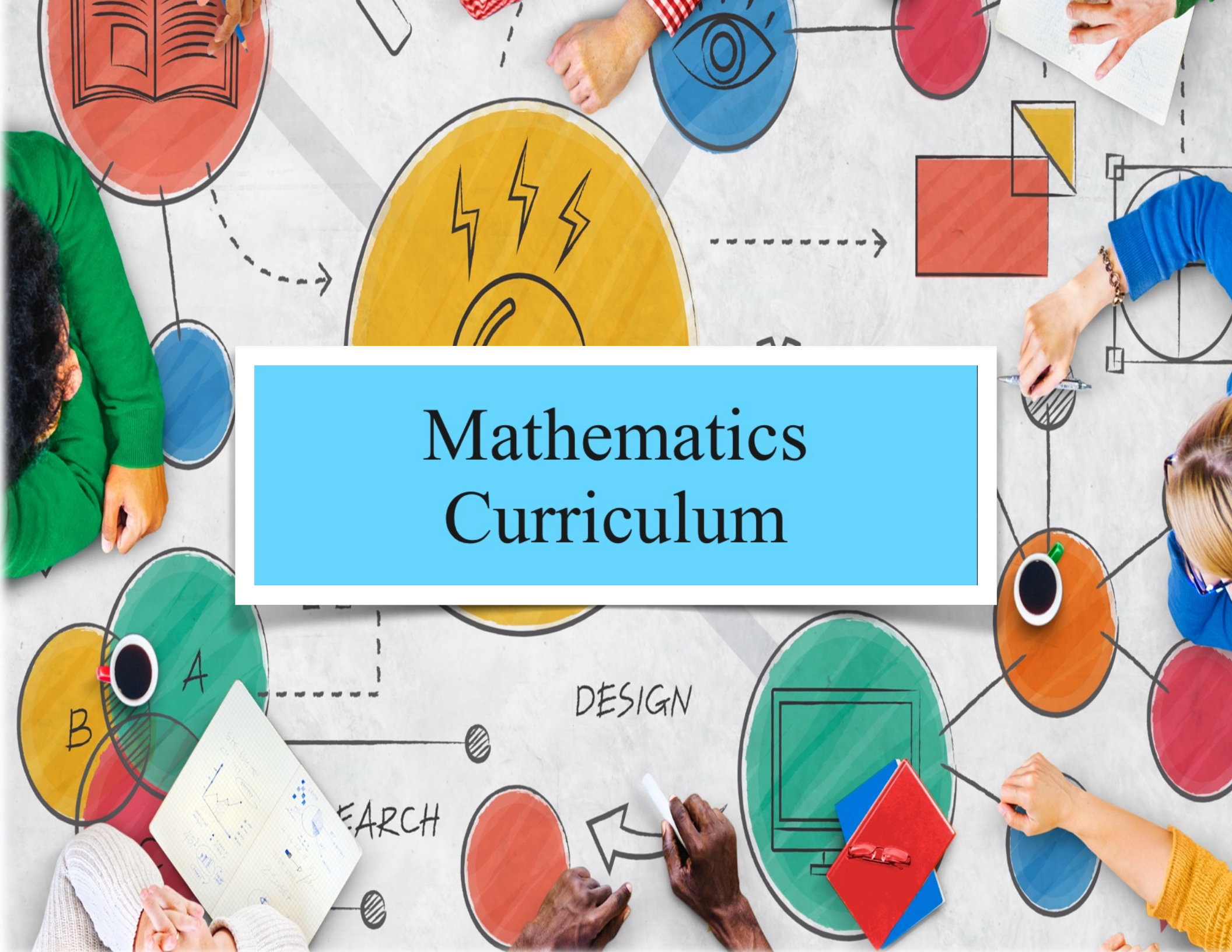


A top-down view of a collaborative workspace. Several people are visible, their hands and arms reaching into the frame. They are surrounded by a large, light-colored surface covered with hand-drawn diagrams and sketches. The diagrams include a central yellow circle with three lightning bolts, a red circle with an open book, a blue circle with an eye, a green circle with a computer monitor, and an orange circle with a coffee cup. There are also various geometric shapes like squares and circles, and dashed lines connecting different parts of the diagrams. The text "Mathematics Curriculum" is prominently displayed in a blue box in the center. Other text visible includes "DESIGN", "RESEARCH", and letters "A" and "B" near a coffee cup.

Mathematics Curriculum

Curriculum: Maths

MATHS

Maths

Children will master the key fundamental skills of maths to become **confident and numerically agile** with a confident **‘can do’ attitude** towards mathematics. They will know and apply all their timetables with ease. They will learn and articulate the **concepts** that underpin **key mathematical understanding** and be able to make links between different mathematical disciplines.

They will be confident in solving **challenging mathematical problems** deliberately focusing and articulating the **systematic reasoning**.

Ambitious: Our curriculum is deliberately ambitious and reflects the high expectations and strong moral values of the academy vision and ethos. It is designed to go beyond the NC to provide a broad, rich, aspirational offer for all pupils. This includes specialist teaching in science, PE, the arts and instrumental tuition. It is equally ambitious for pupils with SEND. Reading is at the heart of all learning ensuring that every child can read fluently despite their barriers, needs or their ability.

Sequenced: Curriculum content has been carefully developed by subject experts to embed unique subject disciplines and build the necessary conceptual understanding that underpins subject knowledge. It is clearly defined, coherently sequenced and discretely taught directly and explicitly in every year group. It relates to previous learning and is built progressively over time. Pupils reach predetermined subject-specific outcomes with a deep understanding that enables confident articulation alongside long term memory gains.

Contextualised: The curriculum is purposely designed to be inclusive and meet the needs of the local community. It powerfully addresses social disadvantage, eliminates discrimination and supports diversity. This is achieved by raising aspirations, setting high expectations, offering inspiring content and building deep subject understanding. It exposes pupils to an exceptional range of cultural capital opportunities and extra-curricular activities ensuring children leave as happy, well-rounded, respectful and successful individuals able to make a positive difference in society.

EYFS- Progress in Maths - Composite Goals

Autumn 1		Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5		Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5 -Automatically recall number bonds to 5 and some bonds to 10, including double facts.	Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5 -Automatically recall number bonds to 5 and some bonds to 10, including double facts.	Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5 -Automatically recall number bonds to 5 and some bonds to 10, including double facts.	Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other -Verbally count beyond 20, recognising the pattern of the counting system Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5 -Automatically recall number bonds to 5 and some bonds to 10, including double facts.	Numerical Patterns -Explore and represent patterns within numbers up to 10, including evens, odds, double facts and how quantities can be disturbed equally -Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other -Verbally count beyond 20, recognising the pattern of the counting system Number -Have a deep understanding of number to 10, including composition of each number -Subitise (recognise quantities without counting) up to 5 -Automatically recall number bonds to 5 and some bonds to 10, including double facts.

EYFS- Progress in Maths - Component Parts

1	<i>Settling in days/Baseline</i>	It's me 1,2,3 -Represent 1,2 and 3 -1 more -1 less -Composition of 1,2 and 3	0,1,2,3,4,5 -Introduce 0-5 -Find 0-5 -Subitise 0-5 Represent 0-5	Building 9 and 10 -Finding 9 and 10 -Comparing numbers to 10 -Represent 9 and 10 -Conceptual subitising to 10	To 20 and beyond -Build numbers beyond 10 (10-13) -Continue patterns beyond 10 (10-13) -Build numbers beyond 10 (14-20) -Continue patterns beyond 10 (14-20) -Verbal counting beyond 20 and patterns	Sharing and grouping -Explore sharing -Sharing -Explore grouping -Grouping
2	Match, Sort and compare -Match objects -Match pictures and objects -Identify a set	Circles and triangles -Identify and name circles and triangles -Compare circles and triangles -Shapes in the environment -Describe position	0,1,2,3,4,5 -One more -One less -Composition 0,1,2,3,4,5 -Conceptual subitising to 5	Building 9 and 10 -1 more -1 less -Composition to 10 -Bonds to 10 (2 parts) -Make arrangements of 10	How many now? -Add more -How many did I add? -Take away -How many did I take away?	Sharing and grouping -Even and odd sharing -Play with and build doubles
3	Match, Sort and compare -Sort objects to a type -Explore sorting techniques -Create sorting rules -Compare amounts	1,2,3,4,5 -Find 4 and 5 -Subitise 4 and 5 -Represent 4 and 5	Mass and capacity -Compare mass -Find a balance -Explore capacity -Compare capacity	Building 9 and 10 -Bonds to 10 (3 parts) -Doubles to 10 (Find a double) -Doubles to 10 (Make a double) -Explore even and odd	Manipulate, compose and decompose -Select shapes for a purpose -Rotate shapes -Manipulate shapes -Explain shape arrangements	Visualise, build and map -Identify units of repeating patterns -Create own pattern rules -Explore own pattern rules -Replicate and build scenes and constructions
4	Talk about measures and pattern -Compare size -Compare mass -Compare capacity	1,2,3,4,5 -1 more -1 less -Composition of 4 and 5 -Composition of 1-5	Growing 6,7,8 -Find 6,7,8 -Represent 6,7,8 -1 more -1 less	Explore 3D shapes -Recognise and name 3-D shapes -Find 2-D shapes within 3-D shapes -Use 3-D shapes for tasks	Manipulate, compose and decompose -Compose shapes -Decompose shapes -Copy 2-D shape pictures -Find 2-D shapes within 3-D shapes	Visualise, build and map -Visualise from different positions -Describe positions and give instructions to build -Explore mapping -Represent maps with models -Create own maps from familiar places or story situations
5	Talk about measures and pattern -Explore simple patterns -Copy and continue simple patterns -Create simple patterns	Shapes with 4 sides -Identifying and name shapes with 4 sides -Combine shapes with 4 sides	Growing 6,7,8 -Composition of 6,7,8 -Make pairs- odd and even -Double to 8 (find a double) -Double to 8 (make a double)	Explore 3-D shapes -Identify more complex patterns -Copy and continue patterns -Patterns in the environment	Consolidation	Make connections -Deepen understanding -Patterns and relationships
6	It's me 1,2,3 -Find 1,2,3 -Subitise 1,2,3 -Represent 1,2,3	Shapes with 4 sides -Shapes in the environment -My day and night	Length, height and time -Explore and compare length -Explore and compare height -Order and sequence time			Transition
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Year 1- Progress in Maths -COMPOSITE GOALS

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value Count to ten forwards and backwards from a given number. Write numbers to 10 in numerals and words Identify 1 more or less than a given number. Use a range of representations Number: Addition and Subtraction Know number bonds within 10	Number: Addition and Subtraction Know number bonds within 10 Add and Subtract one digit numbers to 10, including zero Use mathematical symbols +, -, = Geometry Recognise and name common 2-D shapes (rectangles, squares, circles and triangles) Recognise and name common 3-D shapes (Cuboids, cubes, pyramids and spheres)	Number: Place Value • Count to 50 forwards and back from a given number; • Write numbers to 50 in numerals and words • Identify 1 more or less than a given number; • Use a range of representations Number: Addition and Subtraction • Know number bonds within 20 • Add and subtract one digit numbers to 20, including zero • Use mathematical symbols +, -, = and solve problems using these	Number: Addition and Subtraction • Know number bonds within 20 • Add and subtract one digit numbers to 20, including zero • Use mathematical symbols +, -, = and solve problems using these Number: Place Value Continued Measurement: Length and Height • Measure and begin to record lengths and heights • Compare, describe and solve practical problems for length and height Measurement: Mass and Volume • Measure and begin to record mass/weight, capacity and volume • Compare, describe and solve practical problems for mass/weight, capacity/volume	Measurement: Mass and Volume • Measure and begin to record mass/weight, capacity and volume • Compare, describe and solve practical problems for mass/weight, capacity/volume Number: Multiplication and Division • Count in multiples of 2, 5, 10 • Solve one step problems involving multiplication and division Number: Fractions • Recognise, find and name a half / quarter of any object, shape or quantity • Compare, describe and solve problems involving measure and fractions	Number: Fractions Continued Geometry: Position and Direction • Describe, position, direction and movement including turns Number: Place Value • Count to a hundred forwards and backwards from a given number. Write numbers to 100 in numerals and words • Identify 1 more or less than a given number • Use a range of representations Measurement: Money • Recognise/know different values of different coins/notes Measurement: Time • Sequence events • Recognise language to do with time • Tell the time to hour/ half past

Year 1- Progress in Maths - COMPONENT PARTS

1	Number: Place Value -Sort, represent, count objects -Write numbers to 10	Number: Addition and Subtraction -fact families-addition facts -Number bonds within 10 -Systematic number bonds within 10	Number: Place Value -Count within 20 -Understand 10 -Understand 1, 12 and 13	Number: Addition and Subtraction -Doubles -Near doubles -Subtract ones using number bonds	Measure: Mass and Volume -Heavier and lighter -Measure and compare mass -Full and empty -Compare volume -Measure and compare Capacity	Number: Fractions -Recognise and find 1/4 of an object or shape -Recognise and find 1/4 of an amount
2	Number: Place Value -Recognise Numbers as words -Count on from any number -1 more	Number: Addition and Subtraction -Number bonds to 10 -Addition: add together -Addition: add more	Number: Place Value -Understand 14, 15 and 16 -Understand 17, 18 and 19 -Understand 20	Number: Addition and Subtraction -Subtraction: counting back -Subtraction: finding the difference	Number: Multiplication and Division -Count in 2s -Count in 10s -Count in 5s	Geometry: Position and direction -Describe turns -Describe position (left and right) -Describe position (forwards and backwards) -Describe position (above and below) -Ordinal numbers
3	Number: Place Value -Count back within 10 -1 less -Match, compare and order objects and numbers	Number: Addition and Subtraction -Addition problems -Find a part -Subtraction: Find a part	Number: Place Value -1 more and 1 less -The number line to 20 -Use number line to 20 -Estimate on a number line to 20	Number: Addition and Subtraction -Related facts -Missing number problems	Number: Multiplication and Division -Recognise equal groups -Add equal groups -Make arrays	Number: Place Value -Count from 50 to 100 -Tens to 100 -Partition into tens and ones
4	Number: Place Value -Fewer, more and same -Less than, greater than, equal to -Compare numbers	Number: Addition and Subtraction -Fact families- the 8 facts -Subtraction: take away/cross out (how many left?)	Number: Place Value -Compare numbers to 20 -Order numbers to 20	Number: Place Value -count from 20 -50 -20, 30, 40 and 50 -Counting by making groups of tens	Number: Multiplication and Division -Make doubles -Make equal groups (grouping) -Make equal groups (sharing)	Number: Place Value -The number line to 100 -1 more 1 less -Compare numbers with the same number of tens -Compare 2 numbers
5	Number: Place Value -Order objects and numbers -The number line	Number: Addition and Subtraction -Subtraction on a number line -Add or subtract 1 or 2	Number: Addition and Subtraction -Add by counting on within 20 -Add ones using number bonds -Find and make number bonds to 20	Number: Place Value -Groups of tens and ones -Partition into tens and ones -The number line to 50 -Estimate on a number line to 50	Number: Fractions -Recognise a half of an object or a shape -Find half of an object or a shape -Recognise and find half of a quantity	Measurement: Money -Unitising -Recognise coins -Recognise coins -Recognise notes -Count in coins
6	Number: Addition and subtraction -Part whole models -Write number sentences (Number bonds within 10)	Geometry -Recognise and name 3D shapes -Sort 3D shapes -Recognise and name 2D shapes -Sort 2D shapes -Patterns with 2D and 3D shapes		Number: Place Value -One more, one less Measurement: Length and height -Compare length and height -Measure length using objects -Measure lengths in centimetres		Measurement: Time - before and after - Days of the week - Months of the year - Hours, minutes and seconds - Tell the time to the hour - Tell the time to the half hour

Year 2 - Progress in Maths - Composite Goals

Autumn 1		Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value - Reading / write numbers to at least 100 in numerals and words. - Recognise place value of a two digit number - Identify, represent and estimate numbers using representations - Compare / order numbers from 0 up to 100; use < > and = signs - solve problems using number - Count backwards/ forwards in steps of 2,3,5 from 0, in tens from any number; Number: Addition and Subtraction - Recall addition and subtraction facts to 20. Derive facts up to 100. - Add / subtract using concrete, pictorial representations - Know that commutative law can only be applied to addition	Number: Addition and Subtraction - Recall addition and subtraction facts to 20. Derive facts up to 100. - Add / subtract using concrete, pictorial representations - Know that commutative law can only be applied to addition	Geometry: Properties of shape - Identify/describe 2D shapes - Identify/describe 3D shapes - Compare/sort common 2D/3D shapes Measurement: Money - Recognise / Use symbols for £ and p ; making combinations to make amounts. - Making combinations of coins of same value - Solve problems in context involving addition/ subtraction Number: Multiplication and Division Number: Multiplication and Division - Recall multiplication / division facts. 2,5,10 and odd and even. - Calculate statements / solve word problems using arrays - Only multiplication is commutativeNumber: Fractions - Recall/ use multiplication/division facts for 2,5,10 times tables, including odd / even. - Calculate statements/solve word problems using $\times$, $\div$, $=$ - Only multiplication is commutative.	Number: Multiplication and Division - Recall multiplication / division facts. 2,5,10 and odd and even. - Calculate statements / solve word problems using arrays - Only multiplication is commutativeNumber: Fractions - Recall/ use multiplication/division facts for 2,5,10 times tables, including odd / even. - Calculate statements/solve word problems using $\times$, $\div$, $=$ - Only multiplication is commutative. Number: fractions - Recognise, find, name and write fractions $1/3, 1/4, 2/4$ and $3/4$ of length/shape objects and quantity - Write simple fractions $1/2$ of 6=3. Recognise equivalence of $2/4$ and $1/2$	Measurement: Time - Tell/ write the time to 5 minutes, including quarter past/to the hour on a clock face. - Know the number of minutes in an hour/ hours in a day. - Compare and sequence intervals of time Measurement: Length and Height - Choose/use appropriate standard units to estimate and measure: length, height, mass, temperature to the nearest unit using appropriate tools. - Compare / order length, mass, volume, capacity. Record using <, > and = Measurement: Mass, Capacity and Temperature - Choose/use standard unit measure to estimate/ measure length, height in any direction, mass, temperature, capacity to the nearest unit using rulers, scales, thermometers and measuring vessels. - Compare/order lengths, mass, volume/capacity and record using < > and = Geometry: Position and Direction - Use mathematical vocabulary to describe position, direction, movement including in a straight line and distinguishing between rotation as a turn (angles: quarter, half turn, three-quarter turn) clockwise and anti clockwise. - Order / arrange objects in patterns and sequences	Statistics - Interpret/construct pictograms, tally charts, blocks diagrams and simple tables - Ask/answer simple questions by counting/ sorting/totalling/ comparing Investigations - Apply knowledge, skill and understanding of taught areas to investigations, drawing on all taught skills

Year 2 - Progress in Maths - Component Parts

1	Number: Place Value - Numbers to 20 - Count objects to 100 by making 10s - Recognise 10s and 1s - Use place value chart	Number: Addition and subtraction - Add by making 10 - Add 3 1- digit numbers - Add to the next 10	Geometry: Properties of shape - Recognise 2D and 3D shapes - Count sides, vertices on 2D shapes - Draw 2D shapes - Lines of symmetry on shapes	Number: Multiplication and Division - Use arrays - Make equal groups-grouping - Make equal groups-sharing 2 times table and divide by 2	Number: fractions - Equal and unequal parts - Recognise and find a half - Recognise and find $1/4$	Statistics - Make tally charts - Tables - Block diagrams - Draw pictograms - Interpret pictograms
2	Number: Place Value - Partition numbers to 100 - Write numbers to 100 in words - Flexibly partition numbers to 100	Number: Addition and subtraction - Add across a 10 - Subtract across 10	Geometry: Properties of shape - Sort 2D shapes - Count faces, edges, vertices on 3D shapes - Sort 2D and 3D shapes - Make patterns	Number: Multiplication and Division - Doubling and halving - odd and even 10 times table - Divide by 10	Number: fractions - Recognise and find a $1/3$ - Find a whole - Unit and non-unit fractions - Equivalent of $1/2$ and $2/4$	Statistics - Draw pictograms (2,5,10) - Interpret pictograms (2,5,10)
3	Number: Place Value - Write numbers to 100 in expanded form 10s on the number line to 100 10s and 1 one a number line to 100 - estimate numbers on a number line	Number: Addition and subtraction - Subtract from a 10 - Subtract a 1-digit number from a 2-digit number (across 10)	Measurement: Money - Counting money (pence) - Counting money (pounds:notes and coins) - Counting money- pounds and pence - Choose notes and coins - Make the same amount	Number: Multiplication and Division 5 times table - Divide by 5 - The 5 and 10 times tables	Number: fractions - Recognise $3/4$ - Find $3/4$ - Count in fractions up to a whole	Investigations Apply knowledge, skill and understanding of taught areas to investigations, drawing on all taught skills
4	Number: Place Value - Compare objects - Compare numbers - Order objects and numbers	Number: Addition and subtraction 10 more 10 less - Add and subtract 10s - Add two 2-digit numbers (not across 10)	Measurement: Money - Compare amounts of money - Calculate with money - Make a pound - Find change - Two-step problems	Measurement: Length and Height - Measure in centimetres - Measure in meters - Compare lengths and heights - Order lengths and heights - Four operations with lengths and heights	Measurement: Time 0'clock and half past - Quarter past and quarter to - Time past the hour - Time to the hour - Tell time to 5 minutes - Minutes in an hour; hours in a day	Consolidation - Fractions - Addition - Subtraction - Multiplication - Division
5	Number: Place Value - Count in 2s,5s and 10s - Count in 3s Number: Addition and subtraction - Bonds to 10 - Fact families (addition and subtraction bonds within 20)	Number: Addition and subtraction - Add two 2-digit numbers (across 10) - Subtract two 2-digit numbers (not across 10) - Subtract two 2-digit numbers (across 10)	Number: Multiplication and Division - Recognise equal groups - Make equal groups - Add equal groups - Multiplication symbol and multiplication sentences	Measurement: Mass, Capacity and Temperature - Compare mass - Measure in grams and kilograms 4 operations with mass - Compare volume and capacity	Geometry: Position and Direction - Language of position - Describe movement - Describe turns - Describe movement and turns - Shape patterns with turns	Consolidation - Fractions - Addition - Subtraction - Multiplication - Division
6	Number: Addition and subtraction - Related facts - Bonds to 100 (tens) - Add and subtract 1s	Number: Addition and subtraction - Mixed addition and subtraction - Compare number sentences - Missing number problems		Measurement: Mass, Capacity and Temperature - Measure in millilitres - Measure in litres 4 operations with volume and capacity - Temperature		Consolidation - Fractions - Addition - Subtraction - Multiplication - Division
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Year 3 - Progress in Maths - Composite Goals

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value - Identify, represent and estimate numbers using different representations - Find 100 more or less than a given number - Recognise the place value of a three digit number - Compare, order; read and write numbers up to 1000 in numerals/words - Solve problems involving these ideas Number: Addition and Subtraction - Add/Subtract numbers up to and including 3 digits mentally and using a formal written method	Number: Addition and Subtraction - Estimate the answer to a calculation and use inverse operation to check - Solve problems, including missing number problems, using number facts, place value and more complex addition/subtraction Number: Multiplication and Division - Count from 0 in multiples of 4,8,50 and 100 - Recall multiplication/ division fact for 3,4 and 8 times table - write/ calculate mathematical statements	✓ Number: Multiplication and Division - Recall multiplication/ division fact for 3,4 and 8 times table - write/ calculate mathematical statements using times tables they know - Solve problems including missing number problems ✓ Measurement: Length and Perimeter - Measure, compare, add and subtract lengths - Measure the perimeter of simple 2D	Measurement: Length and Perimeter - Measure, compare, add and subtract lengths - Measure the perimeter of simple 2D Number: Fractions - Count up and down in tenths: recognise how tenths arise - Recognise and use fractions as number: unit/ non-unit fractions with small denominators - Recognise, find and write fractions of a discrete set of objects - Solve problems that involve all of the above Measurement: Length and Capacity - Measure, compare, add and subtract lengths (m/cm/mm), mass (kg/g) and volume/ capacity (l/ml)	Measurement: Length and Capacity - Measure, compare, add and subtract lengths (m/ cm/mm), mass (kg/g) and volume/capacity(l/ml) Number: Fractions - Recognise and show, using diagrams equivalent fractions with small denominators - Compare/order unit fractions and fractions with the same denominators. - Add and subtract fractions with the same denominators within one whole - Solve problems that involve all of the above Measurement: Money - Add and subtract amounts of money to give change in £ and p	Measurement: Money - Add and subtract amounts of money to give change in £ and p Geometry: Properties of Shape - Recognise angles as a description of a turn - Identify right angles and explain them in turns - Identify horizontal, vertical, perpendicular and parallel lines. - Draw 2D shapes and make 3D shapes - Recognise 3D shapes in different orientations Statistics - Interpret/ present data in bar chart, pictograms and tables - Solve one step/ two step problems using data

Year 3 - Progress in Maths - Component Parts

1	Number: Place Value -Represent numbers to 100 -Partition numbers to 100 -Number line to 100 -Hundreds	Number: Addition and Subtraction -Add 2-digit and 3 digit numbers -Subtract 2-digit numbers from a 3-digit number -Complements to 100	Number: Multiplication and Division -Multiples of 10 -Related calculations -Reasoning about multiplication - Multiply a 2-digit number by a 1-digit number (no exchange) -Multiply a 2-digit number by a 1-digit number (with exchange)	Measurement: Length and Perimeter -Compare lengths -Add and subtract lengths -Measure and calculate perimeter	Measurement: Length and Capacity -Compare mass -Add and subtract mass -Measure capacity and volume in ml -Measure capacity and volume in L and ml	Measurement: Money -Subtract money -Find change
2	Number: Place Value -Representing numbers to 1000 -Partition numbers to 1000 -Flexible partitioning of numbers to 1000 -Hundreds, tens, ones	Number: Addition and Subtraction -Estimate answers -Inverse operations -Make decisions	Number: Multiplication and Division - Link multiplication and division -Divide a 2-digit number by a 1-digit number (no exchange) -Divide a 2-digit number by a 1-digit number (flexible partitioning) - Divide 2-digit numbers by a 1-digit number (remainders)	Number: fractions -Understand the denominators of unit fractions -Compare and order unit fractions -Understand the numerator of non-unit fractions	Measurement: Length and Capacity -Equivalent capacities and volumes (L and ml) -Compare capacity and volume -Add and subtract capacity and volume	Geometry: Properties of Shape -Turns and angles -Right angles -Compare angles -Measure and draw accurately
3	Number: Place Value -Find 1,10,100 more or less -Number line to 1000 -Estimate on a number line -Compare and order numbers to 1000 -Count in 50s	Number: Multiplication and Division -Multiplication - equal groups -Use arrays -Multiples of 2,5 and 10	Number: Multiplication and Division -Scaling -How many ways? Measurement: Length and Perimeter - Measure in metres and centimetres -Measure in millimetres	Number: fractions -Understand the whole -Compare and order non-unit fractions	Number: fractions -Add fractions -Subtract fractions -Partition the whole	Geometry: Properties of Shape -Horizontal and vertical -Parallel and perpendicular -Recognise and describe 2D shapes
4	Number: Addition and Subtraction -Apply number bonds within 10 -Add and subtract 1s, 10s,100s -Spot patterns	Number: Multiplication and Division -Sharing and grouping -Multiply and Divide by 3 -The 3 times-tables	Measurement: Length and Perimeter - Metres, centimetres and millimetres -Equivalent lengths (m and cm) - Equivalent lengths (cm and mm)	Number: fractions -Fractions and scales -Fractions on a number line -Count in fractions on a number line	Number: fractions -Unit fractions of a set of objects -Non-unit fractions of a set of objects -Reasoning with fractions of an amount	Geometry: Properties of Shape -Draw polygons -Recognise and describe 3D shapes -Make 3D shapes
5	Number: Addition and Subtraction -Adding 1s and 10s across 100 -Subtract 1s and 10s across 100 -Make connections -Add and subtract two numbers (no exchange)	Number: Multiplication and Division -Multiply and Divide by 4 -The 4 times-table	Measurement: Length and Perimeter --To measure perimeter -To calculate perimeter	Number: fractions -Equivalent fractions on a number line -Equivalent fractions as bar models	Measurement: Money -Pounds and pence -Convert pounds and pence -Add money	Statistics -Interpret pictograms -Draw pictograms -Interpret bar charts -Draw bar charts
6	Number: Addition and Subtraction -Add two numbers (across 10) -Add two numbers (across 100) -Subtract two numbers (across 10) -Subtract two numbers (across 100)	Number: Multiplication and Division -Multiply and divide by 8 -The 8 times-table -2,4,8 times-tables		Measurement: Mass and Capacity -Use scales -Measure mass in grams -Measure mass in kg and g -Equivalent masses (kg and g)		Statistics -Collect and represent data -Two-way tables
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Year 4 - Progress in Maths- Composite Goals

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value - Find 1000 more less than a given number - Recognise place value in a 4-digit number - order/compare numbers beyond 1000 - Identify, represent and estimate numbers using different representations - Round any number to the nearest 10,100 or 1000 - Solve problems involving number - Count backwards through zero to include negative numbers - Read Roman numerals to 100 Number: Addition and Subtraction - Add/ subtract 4 digit numbers using a columnar method	Number: Addition and Subtraction - Estimate and use inverse operation to check answers - Solve addition and subtraction two step problems Number: Multiplication and Division - Recall multiplication/ division facts up to 12x12 - Count in a range of multiples (6,7,9,25 and 1000) - Use place value to multiply/ divide mentally by 1 or 0 - Solve problems involving multiplying and adding Measurement: Area - Find the area of rectilinear shapes by counting squares	Number: Multiplication and Division - Recall multiplication/ division facts up to 12x12 - Use place value to multiply/ divide mentally by 1 or 0 - Recognise factor pairs - Multiply two digit and three digit numbers in a formal written layout - Solve problems using addition and multiplication Measurement: Length and Perimeter - Measure and calculate perimeter of a rectilinear figure - Convert between units of measure	Measurement: Length and Perimeter - Measure and calculate perimeter of a rectilinear figure - Convert between units of measure Number: Fractions - Recognise and show using diagrams, families of common equivalent fractions - Count up and down in hundredths - Recognise hundredths - Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities including non-unit fractions - Add and subtract fractions with the same denominator Number: Decimals - Recognise and write decimals equivalent of any number of tenths or hundredths - Find the effect of dividing a one or two digit number by 10/100. - Identify the value of the digits in tenths and hundredths - Solve simple measure and money problems involving fractions and decimals to two decimal places - Convert between different units of measure	Number: Decimals - Compare numbers with the same number of decimal places up to two decimal places - Round decimals with one decimal place to the nearest whole number - Recognise/write equivalent decimals to 1/2, 1/4 and 3/4 Measurement: Money - Estimate, compare and calculate different measures including pounds and pence. - Solve measure and money problems involving fractions and decimals Measurement: Time - Convert between units of measure - Read, write and convert time between 12hour/24 hour - Solve problems involving time	Geometry: Properties of Shape - Identify, compare and order angles. - Classify and compare geometric shapes - Identify lines of symmetry in 2D shapes - Complete simple symmetric figures Statistics - Interpret/present discrete and continuous data using the appropriate graphical methods - Solve comparison, sum and difference problems using information presented in bar charts and time graphs Geometry: Position and Direction - Describe position with coordinates - Plot points to make polygons - Describe movement on a grid

Year 4 - Progress in Maths - Component Parts

1	Number: Place Value - Represent numbers to 1000 - partition numbers to 1000 - Number line to 1000 - Thousands	Number: Addition and Subtraction - Efficient subtraction - Estimate answers - Checking strategies	Number: Multiplication and Division - Factor pairs - Use factor pairs - Multiply by 10 - Multiply by 100	Measurement: Length and Perimeter - Perimeter of rectilinear shapes - Find missing lengths in rectilinear shapes - Calculate the perimeter of rectilinear shapes - Perimeter of regular polygons	Number: Decimals - Divide a 1-digit number by 10 - Divide a 2-digit number by 10 - Hundredths as fractions - Hundredths as decimals	Measurement: Time - Years, months weeks and days - Hours, minutes and seconds - Convert between analogue and digital times - Convert between the 24-hour clock
2	Number: Place Value - Represent numbers to 10,000 - Partition numbers to 10,000 - Flexible partitioning of numbers to 10,000 - Find 1,10,100,1000 more or less	Measurement: Area - What is area? - Count squares - Make shapes - Compare areas	Number: Multiplication and Division - Divide by 10 - Divide by 100 - Related facts-multiplication and division - Informal written methods for multiplication	Number: Fractions - Understand the whole - Count beyond 1 - Partition a mixed number - Number lines with mixed numbers	Number: Decimals - Hundredths on a place value chart - Divide a 1 or 2-digit number by 100 Number: Decimals - Make a whole with tenths - Make a whole with hundredths	Geometry: Properties of Shape - Understand angles as turns - Identify angles - Compare and order angles - Triangles
3	Number: Place Value - Number line to 10000 - Estimate on a number line to 10000 - Compare numbers to 10,0000 - Order numbers to 10,000	Number: Multiplication and Division - Multiples of 3 - Multiply and divide by 6 6 times-table and division facts	Number: Multiplication and Division - Multiply a 2-digit number by 1 digit number - Multiply a 3-digit number by a 1-digit number - Divide a 2-digit number by a 1-digit number (1) - Divide a 2-digit number by a 1-digit number (2)	Number: Fractions - Compare and order mixed numbers - Understand improper fractions - Convert mixed numbers to improper fractions - Convert improper fractions to mixed numbers	Number: Decimals - Partition decimals - Flexibly partition decimals - Compare decimals - Order decimals	Geometry: Properties of Shape - Quadrilaterals - Polygons - Lines of symmetry - Complete a symmetric figure
4	Number: Place Value - Roman Numerals - Round to nearest 10 - Round to nearest 100 - Round to nearest 1000	Number: Multiplication and Division - Multiply and divide by 9 9 times-tables and division facts - The 3,6 and 9 times-tables	Number: Multiplication and Division - Divide a 3-digit number by 1-digit number - Correspondence problems - Efficient multiplication	Number: Fractions - Equivalent fractions on number line - Equivalent fraction families - Add two or more fractions - Add fractions and mixed numbers	Number: Decimals - Round to the nearest whole number - Halves and quarters as decimals Measurement: Money - Write money using decimals - Convert between pounds and pence	Statistics - Interpret charts - Comparison, sum and difference - Interpret line graphs - Draw line graphs
5	Number: Place Value - Round to 10,100,1000 Number: Addition and Subtraction - Add and subtract 1s,10s, 100s, 1000s - Add up to two 4-digit numbers (no exchange) - Add two 4-digit numbers (no exchange)	Number: Multiplication and Division - Multiply and divide by 7 7 times-table and division facts 11 times-table and division facts 12 times-table and division facts	Measurement: Length and Perimeter - Measure in km and m - Equivalent lengths (km and m) - Perimeter on a grid - Perimeter of a rectangle	Number: Fractions - Subtract two fractions - Subtract from a whole amount - Subtract from mixed numbers	Measurement: Money - Compare amounts of money - Estimate with money - Calculate with money - Solve problems with money	Geometry: Position and Direction - Describe position using coordinates - Plot coordinates - Draw 2D shapes on a grid
6	Number: Addition and Subtraction - Add two 4 digit numbers (more than one exchange) - Subtract two 4-digit numbers (no exchange) - Subtract two 4-digit numbers (one exchange) - Subtract two 4-digit numbers (more than one exchange)	Number: Multiplication and Division - Multiply by 1 and 0 - Divide a number by 1 and itself - Multiply three numbers		Number: Decimals - Tenths as fractions - Tenths as decimals - Tenths on a place value chart - Tenths on a number line		Geometry: Position and Direction - Translate on a grid - Describe translation on a grid Consolidation
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Year 5 - Progress in Maths - Composite Goals

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value - Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit - Count forwards/back in powers of 10 - Interpret negative numbers - Round numbers to nearest 10,100,1000,10,000 or 100,000 - Solve problem involving the above - Read Roman numerals to M Number: Addition and Subtraction - add/subtract larger numbers mentally and using a formal written method - Solve multi-step problems	Number: Multiplication and Division - Multiply/divide numbers mentally - Multiply/divide whole numbers by 10,100 and 1000 - Identify factors/multiples, common multiples/factors, prime/composite numbers - Recognise square/cube numbers Number: Fractions - Compare/order fractions whose denominators are multiples of the same number - identify/name/ write equivalent fractions - Recognise mixed numbers and improper fractions and covert between.	Number: Fractions - Compare/order fractions whose denominators are multiples of the same number - identify/name/ write equivalent fractions - Recognise mixed numbers and improper fractions and covert between. Number: Multiplication and Division - Multiply/divide numbers mentally - Multiply numbers up to 4 digits by one/two digit numbers in a written method - Divide numbers up to 4 digits using short division with remainders - Solve problems involving all 4 operations	Number: Decimals and Percentages - Read/write/order and compare numbers up to 3 decimal places - recognise/use thousandths - Round decimals - Solve problems with number up to 3 decimal places - Recognise % symbol and what it means Measurement: Perimeter and Area - measure/calculate the area/perimeter of composite shapes Statistics - Solve comparisons/sum/difference problems using line graphs - complete, read and interpret information tables/timetables	Geometry: Properties of Shape - Draw/ measure angles - Know angles are measured in degrees: estimate/compare acute, obtuse and reflex angles. - Identify angles at a point and one whole turn, angles at a point on a straight line/1/2 turn, other multiples of 90. Geometry: Position and Direction - Identify, describe, represent the position of a shape following a reflection /translation Number: Decimals - Solve problems involving decimals - Multiply and divide whole number and those involving decimals by 10,100 and 1000 - Use all four operations to solve problems involving measure using decimals	Number: Decimals - Solve problems involving decimals - Multiply and divide whole number and those involving decimals by 10,100 and 1000 - Use all four operations to solve problems involving measure using decimals Measurement: Converting Measures and Volume - Convert between metric units - Use approximate equivalences - Estimate volume - Solve measure problems

Year 5 - Progress in Maths - Component Parts

1	Number: Place Value - Roman numerals to 1,000 - Numbers to 10,000 - Numbers to 100,000 - Numbers to 1,000,000	Number: Multiplication and Division - Multiples - Common multiples - Factors - Common factors	Number: Fractions - Add two mixed numbers - Subtract fractions - Subtract from a mixed number - Subtract from a mixed number (breaking the whole)	Number: Fractions - Multiply a unit fraction by an integer - Multiply a non-unit fraction by an integer - Multiply a mixed number by an integer - Calculate a fraction of a quantity	Measurement: Perimeter and Area - Perimeter of rectangles - Perimeter of rectilinear shapes - Perimeter of polygons - Area of rectangles	Number: Decimals - Use known facts to add and subtract decimals within 1 - Complements to 1 - Add and subtract decimals across 1 - Add decimals with the same number of decimal places
2	Number: Place Value - Read and write numbers to 1,000,000 - Powers of 10 10/100/1,000/10,000/100,000 more or less - Partition numbers to 1,000,000	Number: Multiplication and Division - Prime numbers - Square numbers - Cube numbers	Number: Fractions - Subtract two mixed numbers Number: Multiplication and Division - Multiply up to a 4-digit number by 1-digit number - Multiply a 2-digit number by a 2-digit number (area model) - Multiply a 2-digit number by a 2-digit number	Number: Fractions - Fraction of an amount - Find the whole - Use fractions as operators	Measurement: Perimeter and Area - Area of compound shapes - Estimate area Statistics - Draw lines graphs - Read and interpret line graphs - Read and interpret tables	Number: Decimals - Subtract decimals with the same number of decimal places - Add decimals with different numbers of decimal places - Subtract decimals with different numbers of decimal places - Efficient strategies for adding and subtracting decimals
3	Number: Place Value - Number line to 1,000,000 - Compare and order numbers to 100,000 - Compare and order numbers to 1,000,000	Number: Multiplication and Division - Multiply by 10,100,1,000 - Divide by 10,100,1,00 - Multiples of 10,100,1,00	Number: Multiplication and Division - Multiply a 3-digit number by a 2-digit number - Multiply a 4-digit number by a 2-digit number - Solve problems with multiplication	Number: Decimals and Percentages - Decimals up to 2 decimal places - Equivalent fractions and decimals (tenths) - Equivalent fractions and decimals (hundredths) - Equivalent fractions and decimals	Statistics - Two-way tables - Read and interpret timetables Geometry: Properties of shape - Understand degrees and classify angles - Estimate and measure angles to 180	Number: Decimals - Decimal sequences - Multiply by 10,100,1,000 - Divide by 10,100,1,000 - Multiply and divide decimals (missing values)
4	Number: Place Value - Round to the nearest 10,100,1,000 - Round to the nearest 100,000 - Round to the nearest 1,000,000	Number: Fractions - Find fractions equivalent to a unit fraction - Find fractions equivalent to a non-unit fraction - Recognise equivalent fractions - Convert between improper fractions and mixed numbers	Number: Multiplication and Division - Short division - Divide a 4-digit number by a 1-digit number - Divide with remainders	Number: Decimals and Percentages - Thousandths as fractions - Thousandths as decimals - Thousandths on a place value chart - Order and compare decimals (same number of decimal places)	Geometry: Properties of shape - Draw line, calculate angles and angles around a point - Calculate angles on a straight line - Lengths and angles in shapes, regular and irregular polygons 3D shapes	Number: Place Value - Understand negative numbers - Count through zero in 1s - Count through zero in multiples - Compare and order negative numbers - Find the difference
5	Number: Addition and Subtraction - Mental strategies - Add whole numbers with more than 4 digits - Subtract whole numbers with more than four digits - Round to check answers	Number: Fractions - Convert between mixed number and improper fractions - Compare fractions less than 1 - Order fractions less than 1 - Compare and order fractions greater than 1	Number: Multiplication and Division - Efficient division - Solve problems with multiplication and division	Number: Decimals and Percentages - Order and compare any decimals with up to 3 decimal places - Round to the nearest whole number - Round to 1 decimal place	Geometry: Position and Direction - Read and plot coordinates - Problem solving with coordinates - Translation - Translation with coordinates - Lines of symmetry - Reflection in horizontal and vertical lines	Measurement: Converting Measures and Volume - Kg and km - mm and ml - Convert units of length - Convert between metric and imperial units - Convert units of time - Calculate with timetables
6	Number: Addition and Subtraction - Inverse operations (addition and subtraction) - Multi-step addition and subtraction problems - Compare calculations - Find missing numbers	Number: Fractions - Add and subtract fractions with the same denominator - Add fractions within 1 - Add fractions with total greater than 1 - Add to a mixed number		Number: Decimals and Percentages - Understand percentages - Percentages as fractions - Percentages as decimals - Equivalent fractions, decimals and percentages		Measurement: Converting Measures and Volume - Cubic centimetres - Compare volume - Estimate volume - Estimate capacity
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Year 6 - Progress in Maths - Composite Goals

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Number: Place Value - Read, write, order, compare numbers up to 10,000,000. Know value of digit - Round numbers with accuracy - Use negative numbers in context, and calculate intervals across zero - Solve number and practical problems involving the above Number: Addition, Subtraction, Multiplication and Division - Solve multi-step word problems involving all four operations - Multiply multi-digit number up to 4 digits by 2-digits using long multiplication - Divide numbers up to 4 digits by 2 digit using formal written methods (remainders, decimals, fractions, rounding) - Perform mental calculations, including with mixed operations and large numbers. - Identify common factors, multiples and prime numbers	Number: Fractions - Use common fractions to simplify fractions; use common multiples - Compare/order fractions - Add/subtract/multiply/divide fractions - Recall and use equivalences between decimals and percentages Measurement: Converting Units - Solve problems using the calculation/conversion of units of measure, using decimal notation up to 3 decimal places. - Use, read, write, convert between standard units, converting measurements of length, mass, volume and time. Big to small and vice versa. - Convert between M and KM Geometry: Position and Direction - Describe positions on the full co-ordinates grid (4 quadrants) - Draw and translate shapes on co-ordinate grids and reflect them.	Ratio - Solve problems with relative sizes of two quantities using x and / to find missing values - Solve problems involving similar shapes where the scale factor known/can be found - Solve problems involving unequal sharing and grouping using knowledge of fractions/ multiples Algebra - Use simple formulae. Generate/describe linear number sequences - Find pairs of numbers for equation with 2 unknowns. Number: Decimals - Identify the value of digits in numbers given to 3 decimal places. Multiply by 10,100,1000. Giving answers to 3 decimal places	Number: Decimals - Identify the value of digits in numbers given to 3 decimal places. Multiply by 10,100,1000. Giving answers to 3 decimal places Number: Fractions - Use common fractions to simplify fractions; use common multiples - Compare/order fractions - Add/subtract/multiply/divide fractions - Recall and use equivalences between decimals and percentages Measurement: Perimeter, Area and Volume - Shapes with the same area can have different perimeter. - Use formulae for some area and volume problems. - Calculate, estimate, compare volume of cubes, cuboids using standard units cm³, m³	Statistics - interpret/construct pie charts and line graphs and use these to solve problems - Calculate the mean as an average Geometry: Properties of Shapes - Draw 2D shapes using given dimensions and angles - Compare and classify geometric shapes based on their properties/sizes and find unknown angles in triangles, quadrilaterals and regular polygons. - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles - Illustrate and name parts of circles, including radius, diameter, circumference. Know the diameter is twice the radius. Geometry: Position and Direction	Investigations Apply knowledge, skill and understanding of taught areas to investigations, drawing on all taught skills

Year 6 - Progress in Maths - Component Parts

1	Number: Place Value -Numbers to 1,000,000 -Numbers to 10,000,000 -Read, write numbers to 10,000,000 -Powers of 10	Number: Addition and Subtraction -Reason from known facts. Number: Fractions -Equivalent fractions and simplifying -Equivalent fractions on a number line -Compare and order (denominator)	Ratio -Add or multiply? -Use ratio language -Introduction to the ratio symbol -Ratio and fractions -Scale drawing	Number: Decimals -Multiply by 10,100,1,000 -Multiply decimals by integers -Divide decimals by integers -Multiply and divide decimals in context	Geometry: Properties of Shapes -Angles in polygons -Draw shapes accurately -Nets of 3D shapes Geometry: Position and Direction -The first quadrant. -Read and plot points in four quadrants	Investigations and consolidation as required
2	Number: Place Value -Number line to 10,000,000 -Compare, order any integers -Round any integer -Negative numbers	Number: Fractions -Compare and order (numerator) -Add and subtract simple fractions -Add and subtract any two fractions -Add mixed numbers	Ratio -Use scale factors -Similar shapes -Ratio and proportion problems -Recipes	Number: Fractions -Decimal and fraction equivalents -Fractions as division -Understand percentages -Fractions to percentages	Geometry: Position and Direction -Solve problems with coordinates -Translations -Reflection	
3	Number: Addition and Subtraction -Add and subtract integers -Common factors -Common multiples -Rules of divisibility	Number: Fractions -Subtract mixed numbers -Multi-step problems -Multiply fractions by integers -Multiply fractions by fractions	Algebra -1-step function machines -2-step function machines -Form expressions -Substitution -Formulae	Number: Fractions -Equivalent fractions, decimals and percentages -Order fractions, decimals and percentages -Percentages of amounts (one step and multi-step) -Percentages - missing values	Revision	
4	Number: Addition and Subtraction -Primes to 100 -Square and cube numbers -Multiply up to a 4-digit number by a 2-digit number -Solve problems with multiplication	Number: Fractions -Divide fractions by integers -Divide any fraction by an integer -Mixed questions with fractions	Algebra -Form equations -Solve 1-step equations -Solve 2-step equations -Find pairs of values -solve problems with two unknowns	Measurement: Perimeter, Area and Volume -Shapes (same area) -Areas and perimeter (counting squares) -Area of a right angled triangle and any triangle -Area of parallelogram -Volume of cuboids	SATS	
5	Number: Addition and Subtraction -Short division -Division using factors -Introduction to long division -Long division with remainders	Number: Fractions -Fractions of amount -Fraction of amount (find the whole)	Number: Decimals -Place value within 1 -Place Value- Integers and decimals -Round decimals -Add and subtract decimals	Statistics -Line graphs -Dual bar charts -Read and interpret pie charts -Draw pie charts -The mean	Investigations and consolidation as required	
6	Number: Addition and Subtraction -Solve problems with division -Solve multi step problems -Order of operations -Mental calculations and estimation	Measurement: Converting Units -Metric measures -Convert metric measures -Calculate with metric measures -Miles and kilometres -Imperial measures		Geometry: Properties of Shapes -Measure and classify angles -Calculate angles -Vertically opposite angles -Angles in a triangle (special cases and missing angles) -Angles in a quadrilateral		
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Whole School Online Maths Homework

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