

Maths



	Autumn 1	Autumn 2		Spring 1	Spring 2	Su	ummer 1	Summer 2
EYFS	 Getting to know y Match, sort and c Talk about measu It's me 1, 2, 3 Circles and Triang 1, 2, 3, 4, 5 Shapes with 4 side 	vou! ompare ire and patterns gles es		Alive in 5 Mass and capacity Growing 6, 7, 8 Length, height and Building 9 and 10 Explore 3D shapes	y d time s	- - - - - - - - - Consolid	To 20 and beyond How many now? Manipulate, com Shaping and grou Visualise, build ar Make connection	d pose and decompose ping nd map s
YR1	Number - Place Value (with Sort and count ob then larger group Represent objects Recognise number Count on from an 1 more Count backwards 1 less Compare groups b Fewer, more, sam Less than, greater Compare numbers Order objects and The number line - Addition and sub Introduction of por	in 10): bjects (from small and s) fors as words y number within 10 by matching than, equal to s I numbers traction (within 10): arts and wholes	Numbe	r Place Value (with Count within 20 Understand 10, 1: 18, 19, 20 One more/one less The number line Estimate on a nur Compare and ord Order number to a Add by counting of Add ones using nu Find and make nu Doubles Near doubles Subtract ones usin	in 20): 1, 12, 13, 14, 15, 16, 17, is o 20 e to 20 mber line to 20 er numbers to 20 20 traction (within 20): on within 20 umber bonds imber bonds to 20 and the conduct of	Number	r Multiplication an Count in 2s Count in 10s Count in 5s Recognise equal g Add equal groups Make arrays Make arrays Make equal group Make equal group Make equal group Make equal group Make equal group Fractions: Recognise a half of Find a half of a quar Find a quarter of Papagenise a quar	nd division: groups groups ps – grouping ps – sharing of an object or a shape object or a shape of a quantity uantity ter of an object of a shape an object or a shape ter of a cuantity
	Write number sen	itences		Subtraction – find	ling the difference		Find a quarter of	a quantity







Fact families – addition facts Number bonds within 10 Number bonds to 10 Addition – add together Addition – add more Addition – problem solving and reasoning Find a part Subtraction – find a part Fact families – the 'eight' facts Subtraction – take away/cross out/how many left? Subtraction on a number line Add or subtract 1 or 2

Geometry

- Shape:

Recognise, name and sort 3D shapes Recognise, name and sort 2D shapes Patterns with 2D and 3D shapes

Consolidation

Related facts Missing number problems

Place Value (within 50): Count from 20-50 20, 30, 40 and 50 Count by making groups of 10 Groups of tens and ones Partition into tens and ones The number line to 50 Estimate on a number line to 50 1 more, 1 less

Measurement

- Length and Height: Compare lengths and heights Measure length using objects Measure length in centimetres

Mass and volume: Heavier and lighter Measure mass Compare mass Full and empty Compare volume Measure capacity Compare capacity

Consolidation

Geometry

Position and direction: Describe turns Describe position – left and right Describe position – forwards and backwards Describe position – above and below Ordinal numbers

Number

Place Value (within 100): -Count from 50 to 100 Tens to 100 Partition into tens and ones The number line to 100 1 more, 1 less *Compare numbers with the same number* of tens Compare any two numbers Measurement Money: -Unitising **Recognise coins Recognise notes** Count in coins 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
			Consolidation
YR2	Number	Measurement	Number
	- Place Value:	- Money:	- Fractions:
	Numbers to 100 (in groups of 10)	Count money – pence	Introduction to parts and whole
	Recognise tens and ones	Count money – pounds (notes and coins)	Equal and unequal parts
	Use a place value chart	Count money – pounds and pence	Recognise a half
	Partition numbers to 100	Choose notes and coins	Find a half
	Write numbers to 100 in words	Make the same amount	Recognise a quarter
	10s and 1s on a number line to 100	Compare amounts of money	Find a quarter
	Estimate numbers on a number line	Calculate with money	Recognise a third
	Compare and order objects and numbers	Make a pound	Find a third
	Count in 2s, 5s and 10s	Find change	Find the whole
	Count in 3s	Two-step problems	Unit fractions
		Number	Non-unit fractions
	 Addition and subtraction: 	 Multiplication and division: 	Recognise the equivalence of a half and
	Bonds to 10	Recognise equal groups	two quarters
	Addition and subtraction bonds within 20	Make equal groups	Recognise three-quarters
	Bonds to 100	Add equal groups	Find three-quarters
	Add and subtract 1s	Introduce the multiplication symbol	Count in fractions up to a whole
	Add by making 10	Multiplication sentences	Measurement
	Add three 1-digit numbers	Use arrays	- Time:
	Add to the next 10	Make equal groups – grouping	O'clock and half past
	Add across a 10	Make equal groups – sharing	Quarter past and quarter to
	Subtract across 10 and subtract from a 10	The 2 times-table	Tell the time past the hour
	Subtract a 1-digit number from a 2-digit	Divide by 2	Tell the time to the hour
	number (across a 10)	Doubling and halving	Tell the time to 5 minutes
	10 more, 10 less	Odd and even numbers	Minutes in an hour
	Add and subtract 10s	The 10 times-table	Hours in a day
	Add two 2-digit numbers (across and not	Divide by 10	Statistics



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	across 10)	The 5 times-table	Make tally charts
	Subtract two 2-diait numbers (across and	Divide by 5	Tables
	not across 10)	The 5 and 10 times-tables	Block diggrams
	Mixed addition and subtraction	Measurement	Draw pictoarams (1-1)
	Compare number sentences	- Length and height:	Draw pictograms (2, 5, 10)
	Missing number problems	Measure in centimetres	Interpret pictograms (2, 5 and 10)
		Measure in metres	Geometry
	Geometry	Compare lengths and heights	- Position and direction:
	- Shape:	Order lengths and heights	Language of position
	Recognise 2D and 3D shapes	Four operations with lengths and heights	Describe movement
	Count sides and vertices on 2D shapes	- Mass, capacity and temperature:	Describe turns
	Draw 2D shapes	Compare mass	Describe movement and turns
	Lines of symmetry in shapes	Measure in grams	Shape patterns with turns
	Sort 2D and 3D shapes	Measure in kilograms	
	Count faces, edges and vertices on 3D	Four operations with mass	Consolidation
	shapes	Compare volume and capacity	
	Make 2D and 3D patterns	Measure in millilitres	
		Measure in litres	
		Four operations with volume and capacity	
		Temperature	
YR3	Number	Number	Number
	- Place Value:	- Multiplication and division:	- Fractions:
	Represent and partition numbers to 100	Recognise multiples of 10	Add and subtract fractions
	Number line to 100	Understand reasoning style questions	Partition fractions and whole numbers
	Hundreds	based on multiples of 10	Recognise, find and write fractions of a
	Represent and partition numbers to 1,000	Multiply a 2-digit number by a 1-digit	discrete set of objects
	Flexible partitioning of numbers to 1,000	number with no exchange and exchange	Reason with fractions as an amount
	Hundreds, tens and ones	Understand the links between	
	Find 1, 10 or 100 more or less	multiplication and division	Measurement
	Number line to 1,000	Divide a 2-digit number by a 1-digit	- Money:
	Estimate on a number line to 1,000	number with no exchange, exchange,	Recognise and convert pounds and pence







Compare and order numbers to 1,000 Count in 50s

- Addition and subtraction: Apply number bonds within 10 Add and subtract 1s, 10s and 100s Spot the pattern Add and subtract 1s across a 10 Add and subtract 10s across a 100 Make connections Add two numbers (no exchange) Subtract two numbers (no exchange) Add and subtract two numbers across a 10 and across a 100 Add 2-digit and 3-digit numbers Subtract a 2-digit number from a 3-digit number Complements to 100 Estimate answers Inverse operations Make decisions
- Multiplication and division (A): Multiplication – equal groups Use arravs Multiples of 2, 5 and 10 Sharing and grouping Multiply and divide by 3 3 times-table Multiply and divide by 4 The 4 times-table

flexible partitioning and with remainders Multiplication through scaling Reason and problem solve using multiplication and division

Measurement

Length and height: -Measure in metres, centimetres and millimetres Find equivalent lengths using metres, centimetres and millimetres *To compare lengths* To add and subtract lengths To measure and calculate the perimeter Number

-Fractions: Understand the denominators of unit fractions Understand the numerators of non-unit fractions Understand when a fraction becomes a whole Compare and order unit and non-unit fractions Count and place fractions on a number line Show equivalent fractions on umber lines and as bar models -Measurement

Mass and capacity:

Add and subtract money Subtract money to find change

Time: _

Recognise roman numerals to 12 Tell the time to 5 minutes and minutes Understand and use am and pm Read digital clocks Count/understand years, months and days and hours *Compare duration of times/events* Understand hours, minutes and seconds Estimate time Solve problems using time

Geometry

Shape: Recognise angles as turns Recognise right angles Compare angles Measure and draw angles accurately Identify horizontal and vertical lines and pairs of perpendicular and parallel lines Recognise and describe 2D shapes Draw polygons *Recognise, describe and make 3D shapes*

Statistics:

Interpret and draw pictograms Interpret and draw bar charts Collect and represent data including using







	Multiply and divide by 8 The 8 times-table The 2, 4 and 8 times-tables	Use and plot number lines Measure mass in kilograms and grams Find equivalent masses, capacities and volumes Compare mass Add and subtract mass Measure capacity and volume in litres and millimetres Compare capacity and volume in litres and	two-way tables Consolidation
		minimetres	
		Add and subtract capacity and volume	
YR4	Number	Number	Number
	- Place Value:	 Multiplication and division: 	- Decimals:
	Represent and partition numbers to 1,000	Recognise and use factor pairs	Make a whole with tenths
	Number line to 1,000	Multiply by 10 and 100	Make a whole with hundredths
	Thousands	Divide by 10 and 100	Partition decimals
	Represent and partition numbers to 10,000	Solve multiplication and division problems	Compare decimals
	Flexible partitioning of numbers to 10,000	Multiply a 2 –digit number by a 1-dight	Order decimals
	Find 1, 10, 100, 1,000 more or less	number	Round decimals to the nearest whole
	Number line to 10,000	Multiply a 3-digiit number by a 1-digit	number
	Estimate on a number line to 10,000	number	Recognise halves and quarters as decimals
	Compare and order numbers to 10,000	Divide a 2-digit number by a 1-digit	
	Roman numerals	number	Measurement
	Round to the nearest 10, 100 and/or 1,000	Divide a 3-digit number by a 1-digit	- Money:
		number	Write money using decimals
	 Addition and subtraction: 		Convert pounds and pence
	Add and subtract 1s, 10s, 100s and 1,000s	Measurement	Compare amounts of money
	Add up to two 4-digit numbers – no	 Length and perimeter: 	Estimate and calculate with money
	exchange, one exchange and more than	Measure in kilometres and metres	Solve word problems with money







one exchange	Find equivalent lengths	
Subtract to two 4-digit numbers – no	Measure and calculate the perimeter of a	- Time:
exchange, one exchange and more than	rectilinear figure, rectangle, on a grid and	Convert years, months, weeks and days
one exchange	of regular polygons	Convert hours, minutes and seconds
Efficient subtraction	Find missing lengths in rectilinear shapes	Convert between analogue and digital
Estimate answers		Convert to and from the 24 hour clock
Checking strategies	Number	
	- Fractions:	Consolidation
Measurement	Understand fractions as a whole	
- Area:	Partition a mixed number	Geometry
What is area?	Place fractions and mixed numbers onto	- Shape:
Count squares	number lines	Understand/recognise angles as turns
Make shapes	Compare and order mixed fractions	Identify angles
Compare areas	Understand improper fractions	Compare and order angles
	Convert mixed numbers into improper	Compare and classify triangles,
Number	fractions	quadrilaterals and polygons
 Multiplication and division (A): 	Convert improper fractions to mixed	Draw and understand lines of symmetry
Multiples of 3	numbers	Complete symmetric figures
Multiply and divide by 6	Find equivalent fractions	
6 times-table and division facts	Recognise equivalent fraction families	Statistics
Multiply and divide by 9	Add and subtract fractions	Interpret charts
9 times-table and division facts	Add fractions and mixed numbers	Solve comparison, sum and difference
The 3, 6 and 9 times table	Subtract from whole amounts	problems represented through graphs
Multiply and divide by 7	Subtract from mixed numbers	Interpret line graphs
7 times-table and division facts		Draw line graphs
11 times-table and division facts	- Decimals:	
12 times-table and division facts	Recognise tenths as fractions and decimals	Geometry
Multiply by 1 and 0	Place tenths on place value charts and	- Position and direction:
Divide a number by 1 and itself	number lines	Describe position using coordinates
Multiply 3 numbers	Divide a 1-digit number by 10	Plot coordinates
	Divide a 2-diait number by 10	Draw 2D shapes on a arid



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	Consolidation	Recognise hundredths as fractions and	Describe movements between positions as
		aecimais Place hundredthe en place value charte	Liunsialions of a given unit
		Place nunareactis on place value charts	Describe translations on a grid
	Number	Number	Goometry
1K2		- Multiplication and division:	- Shane:
	- Flace value. Roman numerals to 1,000, 10,000: 100,000	- Multiplication and division.	- Shape.
	and 1 000 000	Multiply 2 by 2 (grea model)	Classify actimate and measure angles
	Und 1,000,000. Boad and write numbers to 1,000,000	Multiply 2 by 2 (area model)	Clussify, estimate and inclusive ungles
	Redu und while numbers to 1,000,000	Multiply 2 by 2, 3 by 2 and 4 by 2.	Calculate angles around a point and on a
	Powers of 10	Solve problems with multiplication	Calculate angles around a point and on a
	10; 100; 1,000; 10,000; 100,000 more or	Short division	sträight line
	less	Divide 4 by 1	Lengths and angles in snapes
	Partition numbers to 1,000,000	Efficient division	Regular and irregular polygons
	Number line to 1,000,000	Solve problems using multiplication and	3-D shapes
	Compare and order numbers to 100,000	division	
	and 1,000,000		 Position and direction:
	Round to the nearest 10, 100 or 1,000	- Fractions:	Read and plot coordinates
	Round within 100,000 and 1,000,000	Multiply unit/non-unit/mixed number	Problem solving with coordinates
		fractions	Translation shapes and with coordinates
	 Addition and subtraction: 	Fraction of quantity/amount	Lines of symmetry
	Mental strategies	Find the whole	Reflection in horizontal and vertical lines
	Add and subtract whole numbers with	Fractions as operators	
	more than four digits		Number
	Round to check answers	 Decimals and percentages: 	- Decimals:
	Inverse operations (addition and	Decimals up to 2 d.p.	Add/subtract within 1
	subtraction)	Equivalent fractions and decimals	Complements to 1
	Multi-step addition and subtraction	(tenths/hundredths)	Add/subtract across 1
	problems	Thousandths as fractions, decimals and on	Add/subtract with the same d.p.
	Compare calculations	a place value chart	Add/subtract with different d.p.
	Find missing numbers	Order and compare decimals – up to 3 d.p.	Efficient strategies for +/- decimals
	-	Round to nearest whole and 1 d.p.	Decimal sequences







	 Multiplication and division (A): Multiples and common multiples Factors and common factors Prime, Square and Cube numbers Multiply and divide by 10, 100 and 1,000 Multiples of 10, 100 and 1,000 Fractions (A): 	Understand percentages Percentages as fractions and decimals Equivalent FDP Measurement - Perimeter and area: Perimeter of rectangles, rectilinear shapes and polygons	 X/÷ by 10/100 and 1000 x/÷ decimals – missing values Negative numbers: Understand negative numbers Count through zero in 1s and multiples Compare and order negative numbers Find the difference
	Find fractions equivalent to a unit fraction Find fractions equivalent to a non-unit fraction Recognise equivalent fractions Convert improper fractions to mixed numbers and mixed to improper Compare and order fractions less than 1 and more than 1 Add and subtract fractions with the same denominator Add fractions within 1 Add fractions with a total more than 1 Add to a mixed number Add two mixed numbers Subtract from a mixed number Subtract from a mixed number – breaking the whole Subtract two mixed numbers	Statistics Draw, read and interpret line graphs Two way tables Read and interpret timetables and tables	 Measurement Converting units: Convert using – kilograms, kilometres, millimetres, millilitres Concert units of length and time Convert between metric and imperial Calculate with timetables Volume: Cubic centimetres Compare volume Estimate volume and capacity
YR6	Number	Number	Geometry
	Numbers to 1,000,000 and 10,000,000 Read and write numbers to 10,000,000	Add or multiply? Use ratio language and symbol	- Shape: Measure , classify and calculate angles Vertically opposite angles







Powers of 10	Ratio and fractions	Angles in a triangle, quadrilateral and
Number line to 10,000,000	Scale drawing and scale factors	polygon.
Compare, order and round any integers	Similar shapes	Circles
Negative numbers	Ratio and proportion problems	Draw shapes accurately
	Recipes	Nets of 3-D shapes
- Addition, subtraction, multiplication and		
division:	- Algebra:	- Position and direction:
Add and subtract integers	1 and 2 step function machines	The first quadrant
Common factors and Common multiples	Form expressions	Read and plot in four quadrants
Rules of divisibility	Substitution	Solve problems with coordinates
Primes to 100	Formulae	Translations
Square and cube numbers	Form equations	Reflections
Multiply up to a 4-digit number by a 2-digit	Solve 1 and 2 step problems	
number	Find pairs of values	Themed projects, consolidation and problem
Solve problems with multiplication	Solve problems with 2 unknowns	solving.
Short divisions		
Division using factors	- Decimals:	
Long division and long division with	Place value within 1	
remainders	Place value –integers and decimals	
Solve problems with division	Round decimals	
Solve multi-step problems	Add and subtract decimals	
Order of operations	X and ÷ by 10/100/1000	
Mental calculations and estimation	X/÷ decimals by integers and in context	
Reason from known facts		
	 Fractions, decimals and percentages: 	
- Fractions (A):	Decimal and fraction equivalents	
Equivalent fractions and simplifying	Fractions as division	
Equivalent fractions on a number line	Understand percentages	
Compare and order using the denominator	Fractions to percentages	
and the numerator	Equivalent fractions, decimals and	
Add and subtract simple fractions	percentages	







Add and subtract any two fractions	Order FDP	
Add mixed numbers	Percentage of amounts – 1 and 2 step	
Subtract mixed numbers	Percentages – missing values	
Multi-step problems		
- Fractions (B):	Measurement	
Multiply fractions by integers	 Area, perimeter and volume: 	
Multiply fractions by fractions	Shape – same area	
Divide a fraction by an integer	Area and perimeter	
Divide any fraction by an integer	Area of a triangle – counting squares	
Mixed questions with fractions	Area of a right angled triangle	
Fraction of an amount	Area of any triangle and parallelogram	
Fraction of an amount – find the whole	Volume – counting cubes	
	Volume of a cuboid	
Measurement		
- Converting units:	Statistics	
Metric measures	Line graphs	
Convert metric measures	Dual bar charts	
Calculate with metric measures	Read, interpret and draw pie charts –	
Miles and kilometres	including percentages	
Imperial measures	Finding the mean	