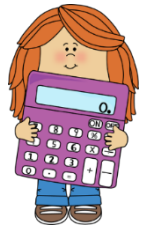
Woodlands Community Primary School

Long term plan – Maths



F2	AUTUMN	
	Numbers to 5	**Vocab:**
	Required prior knowledge Children should know: New learning	End point • count up to 5 objects reliably • recognise the numerals 1, 2, 3, 4 and 5 • match groups of objects to the correct numeral
	Comparing groups within 5	**Vocab:**
	Required prior knowledge Children should know: New learning	End point • identify if a group has more or fewer objects: they can line up objects to check which group has more or fewer • compare two groups of non-identical objects and match them in order to find out which group has more, fewer or the same
	Shape	**Vocab:**
	Required prior knowledge Children should know: New learning	End point • build, describe and sort common 3D shapes (sphere, cylinder, cone, cube, cuboid) • match 3D shapes to their 2D prints and name each of these regular 2D shapes
	Change within 5	**Vocab:**
	Required prior knowledge Children should know:	End point • find one more and one less than a number within 5, and

	New learning	demonstrate this using a five frame and cubes • tell first, then, now stories to express one more or one less • use the vocabulary one less and one more in the correct context
	Number bonds within 5	**Vocab:**
	Required prior knowledge Children should know: New learning	End point • use the language of wholes and parts • use physical differences and number bonds to 5 to split a whole into two parts
	Space	**Vocab:**
	Required prior knowledge Children should know: New learning	End point • use positional and directional language to follow and give instructions
	SPRING	
	Numbers to 10	**Vocab:**
	Required prior knowledge Children should know: •	End point • count numbers up to 10 using one-to-one correspondence • start to recognise that they can count on using a ten frame, understanding that a full row is 5 • count 6–10 objects out from a larger group
	Comparing numbers within 10	**Vocab:**
	Required prior knowledge Children should know: •	End point • use the words more and fewer to compare groups of up to 10 items • start to find the difference between groups by counting on or counting back • represent numbers to 10

	Addition to 10	**Vocab:**
	Required prior knowledge Children should know: •	End point • add two parts to make a whole up to 10 • use a part-whole model to show two parts and the whole, in various orientations
	Measure	**Vocab:**
	Required prior knowledge Children should know: •	End point • describe the length, height and weight of objects using everyday language • solve problems involving length, height and weight
	Number bonds to 10	**Vocab:**
	Required prior knowledge Children should know: •	End point • use a ten frame and a part-whole model to represent bonds to 10 • accurately identify pairs of numbers with a total of 10
	Subtraction	**Vocab:**
	Required prior knowledge Children should know: •	End point • recognise, understand and use the vocabulary linked to number bonds and subtraction • understand the structure of subtraction and finding a missing part • identify how many are left when a variety of numbers are subtracted from 10
	Exploring patterns	**Vocab:**
	Required prior knowledge Children should know: •	End point • recognise and describe patterns • continue patterns and make their own patterns
	SUMMER	

	Counting on and counting back	**Vocab:**
	Required prior knowledge Children should know: •	End point • count forwards and backwards between 1 and 10 confidently • add or take away numbers using a first, then, now story structure
	Numbers to 20	**Vocab:**
	Required prior knowledge Children should know: •	End point • confidently count forwards and backwards to 20 • identify one more and one less than a given number to 20 • use vocabulary such as more and fewer to compare numbers and quantities
	Numerical patterns	**Vocab:**
	Required prior knowledge Children should know: •	End point • use concrete manipulatives to double and halve numbers • show why a number is odd or even • identify doubles to double 5
	Shape	**Vocab:**
	Required prior knowledge Children should know: •	End point • recognise common 2D shapes (triangles and squares) • build and represent a new shape by combining two or more shapes
	Measure	**Vocab:**
	Required prior knowledge Children should know: •	End point • describe the capacity of objects using everyday language • visually compare capacity using taught vocabulary

		• solve problems involving and capacity
	Sorting	**Vocab:**
	Required prior knowledge Children should know: •	End point • sort up to 5 objects into two groups • describe how they have sorted the objects
	Time	**Vocab:**
	Required prior knowledge Children should know: •	End point • use the language related to time: before, after, next, then, later
Y1	**AUTUMN**	
	Place value (within 10)	**Vocab: more, less, greater than, less than, equal to**
	Required prior knowledge Children should know: • use a ten frame and a part-whole model to represent bonds to 10 • accurately identify pairs of numbers with a total of 10	End point • Count forwards and backwards to 10 • Find one more and one less within 10
	Addition and subtraction (within 10)	**Vocab: numeral, equals, number bonds, addition, subtraction**
	Required prior knowledge Children should know: • add two parts to make a whole up to 10 • use a part-whole model to show two parts and the whole, in various orientations	End point • Find a part and a whole • Add within 10 • Subtract within 10
	Shape	**Vocab: rectangles, squares, circles, triangles, cuboid, cubes, pyramids, spheres**
	Required prior knowledge Children should know:	End point • Recognise and name 2D shapes

	• recognise common 2D shapes (triangles and squares) • build and represent a new shape by combining two or more shapes	• Recognise and name 3D shapes
	SPRING	
	Place value (within 20)	**Vocab: numeral, part whole, tens, ones, partition**
	Required prior knowledge Children should know: • confidently count forwards and backwards to 20 • identify one more and one less than a given number to 20 • use vocabulary such as more and fewer to compare numbers and quantities	End point • Use a number line to 20 • Estimate on a number line to 20
	Addition and subtraction (within 20)	**Vocab: number bonds, addition, subtraction**
	Required prior knowledge Children should know: • confidently count forwards and backwards to 20 • identify one more and one less than a given number to 20 • use vocabulary such as more and fewer to compare numbers and quantities	End point • To know doubles to 10 • Add within 20 • Subtract within 20
	Place value (within 50)	**Vocab: numeral, part whole, tens, ones, partition**
	Required prior knowledge Children should know: • confidently count forwards and backwards to 20 • identify one more and one less than a given number to 20 • use vocabulary such as more and fewer to compare numbers and quantities	End point • Partition numbers to 50 in tens and ones • Estimate on a number line to 50 • Count to 50, in ones and tens

	Length and height	**Vocab: measurement, roughly, nearly, estimate, centimetre, ruler**
	Required prior knowledge Children should know: •	End point • Measure length in objects • Measure lengths in centimetres
	Mass and volume (including addition and subtraction)	**Vocab: kilogram, weighs, balances, heaviest, lightest**
	Required prior knowledge Children should know: •	End point • Measure and compare mass • Compare volume • Measure and compare capacity
	SUMMER	
	Multiplication and division	**Vocab: multiply, divide, grouping, array**
	Required prior knowledge Children should know: •	End point • Count in 2s, 5s and 10s • Make equal groups through grouping and sharing
	Fractions	**Vocab: fraction, equal part, quarter, half**
	Required prior knowledge Children should know: •	End point • Find half of a shape and quantity • Find a quarter of a shape and quantity
	Position and direction	**Vocab: underneath, centre, left, right, forwards, backwards, above, below, beyond**
	Required prior knowledge Children should know: •	End point • Describe position using left, right, forwards, backwards, above and beyond
	Place value (within 100)	**Vocab: numeral, part whole, hundreds, tens, ones,**

		partition
	Required prior knowledge Children should know: • confidently count forwards and backwards to 20 • identify one more and one less than a given number to 20 • use vocabulary such as more and fewer to compare numbers and quantities	End point • Count in tens to 100 • Find one more and one less to 100 • Compare two numbers
	Money (including addition and subtraction)	**Vocab: change, costs more, costs less, coin, penny**
	Required prior knowledge Children should know: •	End point • Recognise coins and notes • Count in coins
	Time	**Vocab: months, seasons, earlier, later, date, first, next, last**
	Required prior knowledge Children should know: •	End point • To know days of the week and months of the year • Tell the time to the hour • Tell the time to the half hour
Y2	**AUTUMN**	
	Place value (lesson 1-8)	**Vocab: partition, hundred, tens, ones, represents**
	Required prior knowledge Children should know: • Count forwards and backwards to 10 • Find one more and one less within 10 • Use a number line to 20 • Estimate on a number line to 20 • Partition numbers to 50 in tens and ones • Estimate on a number line to 50 • Count to 50, in ones and tens • Count in tens to 100 • Find one more and one less to 100	End point • Partition numbers to 100 • Write number to 100 in expanded form

	• Compare two numbers	
	Addition and subtraction (lesson 1-7)	**Vocab: addition, tens, ones**
	Required prior knowledge Children should know: • Find a part and a whole • Add within 10 • Subtract within 10 • To know doubles to 10 • Add within 20 • Subtract within 20	End point • Number bonds to 100 in tens • Add three one digit numbers
	Money	**Vocab: bought, penny, pound, cost**
	Required prior knowledge Children should know: • Recognise coins and notes • Count in coins	End point • Choose notes and coins to make the same amount • To calculate with money to make a pound • To calculate with money to find change
	Addition and subtraction (lesson 8-14)	**Vocab: exchange, represents, tens, ones, boundary**
	Required prior knowledge Children should know: • Find a part and a whole • Add within 10 • Subtract within 10 • To know doubles to 10 • Add within 20 • Subtract within 20	End point • Add across a 10 • Subtract a 1 digit number from a 2 digit number (across a 10) • Add and subtract 10s
	Multiplication and division (lesson 1-8)	**Vocab: repeated addition, share equally, row, column**
	Required prior knowledge Children should know: • Count in 2s, 5s and 10s • Make equal groups through grouping and sharing	End point • Add equal groups • Make equal groups
	SPRING	

	Place value (lesson 9-14) **Addition and Subtraction** (lesson 15-18)	**Vocab: exchange, represents, tens, ones, boundary**
	Required prior knowledge Children should know: • Find a part and a whole • Add within 10 • Subtract within 10 • To know doubles to 10 • Add within 20 • Subtract within 20	End point • Estimate numbers on a number line to 100 • Order numbers to 100 • Add and subtract two 2-digit numbers across a 10
	Length and height **Mass, capacity and temperature**	**Vocab: further, furthest, gram, millilitre**
	Required prior knowledge Children should know: • Measure length in objects • Measure lengths in centimetres • Measure and compare mass • Compare volume • Measure and compare capacity	End point • To order lengths and heights in centimetres and metres • Measure in grams and kilograms • Measure in millimetres and litres • To compare and order different temperatures
	Multiplication and division (lesson 9-17)	**Vocab: repeated addition, share equally, row, column**
	Required prior knowledge Children should know: • Count in 2s, 5s and 10s • Make equal groups through grouping and sharing	End point • To know their 2, 5 and 10 times tables • To know odd and even numbers • To divide by 10 and 5
	Fractions	**Vocab: equivalent, mixed number, numerator, denominator**
	Required prior knowledge Children should know: • Find half of a shape and quantity • Find a quarter of a shape and quantity	End point • Find a half, quarter and a third • Recognise the equivalence of a half and a quarter • Recognise and find three-quarters

	Geometry	**Vocab: face, edge, vertex, vertices**
	Required prior knowledge Children should know: • Recognise and name 2D shapes • Recognise and name 3D shapes	End point • Count sides and vertices on a 2D shapes • Find lines of symmetry on shapes • Count faces, edges and vertices on 3D shapes
	Addition and subtraction (Revisit lesson 15-18)	**Vocab: exchange, represents, tens, ones, boundary**
	Required prior knowledge Children should know: • Find a part and a whole • Add within 10 • Subtract within 10 • To know doubles to 10 • Add within 20 • Subtract within 20	End point • Add and subtract two 2-digit numbers across a 10
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	Addition and subtraction (Revisit lesson 15-18)	**Vocab: exchange, represents, tens, ones, boundary**
	Required prior knowledge Children should know: • Find a part and a whole • Add within 10 • Subtract within 10 • To know doubles to 10 • Add within 20 • Subtract within 20	End point • Add and subtract two 2-digit numbers across a 10
	Time	**Vocab: fortnight, digital, analogue, seconds**
	Required prior knowledge Children should know: • To know days of the week and months of the year • Tell the time to the hour • Tell the time to the half hour	End point • Tell the time to O'clock and half past • Tell the time with quarter past and quarter to

	Position and direction	**Vocab: route, higher, lower, clockwise, anticlockwise, straight line**
	Required prior knowledge Children should know: • Describe position using left, right, forwards, backwards, above and beyond	End point • To describe movement and turns • To create patterns with shapes with turns
	Statistics	**Vocab: tally, graph, pictogram, represents, label, title**
	Required prior knowledge Children should know: *This is new learning*	End point • To make tally charts • To draw and interpret pictograms in 1s • To draw and interpret pictograms in 2s, 5s and 10s
	Consolidation – core maths Mathematical Curiosity - Problem Solving and Reasoning	
Y3	**AUTUMN**	
	Place value	**Vocab: hundred more, hundred less**
	Required prior knowledge Children should know: • Partition numbers to 100 • Write number to 100 in expanded form	End point • To partition 100 • To order and compare numbers to 1000
	Addition and subtraction (lesson 1-10)	**Vocab: hundred boundary, addition, altogether, subtract**
	Required prior knowledge Children should know: • Number bonds to 100 in tens • Add three one digit numbers • Add across a 10 • Subtract a 1 digit number from a 2 digit number (across a 10) • Add and subtract 10s • Add and subtract two 2-digit numbers across a 10	End point • To add 1s and 10s across a 100 • To subtract 1s and 10s across a 100
	Length and perimeter (lesson 1-4, 10-12)	**Vocab: millimetre, kilometre, mile, distance apart,**

		between, from, perimeter
	Required prior knowledge Children should know: • To order lengths and heights in centimetres and metres	End point • To measure in metres, centimetres and millimetres • To measure and calculate perimeter
	Shape (lesson 1-6)	**Vocab: pentagonal, hexagonal, octagonal, quadrilateral, right-angled, parallel, perpendicular, hemisphere**
	Required prior knowledge Children should know: • Count sides and vertices on a 2D shapes • Find lines of symmetry on shapes • Count faces, edges and vertices on 3D shapes	End point • To compare angles • To measure and draw angles accurately • To find parallel and perpendicular lines
	SPRING	
	Multiplication and Division by 10 (lesson 1-3)	**Vocab: factor, product, remainder**
	Required prior knowledge Children should know: • Add equal groups • Make equal groups • To know their 2, 5 and 10 times tables • To know odd and even numbers • To divide by 10 and 5	End point • To multiply a number by 10 • To divide a number by 10
	Fractions (A)	**Vocab: sixths, sevenths…, division, equal**
	Required prior knowledge Children should know: • Find a half, quarter and a third • Recognise the equivalence of a half and a quarter • Recognise and find three-quarters	End point • To compare and order non-unit fractions • To find equivalent fractions on a number line
	Time	**Vocab: century, calendar, earliest, latest, a.m, p.m, 12 hour and 24 hour time**
	Required prior knowledge	End point

	Children should know: • Tell the time to O'clock and half past • Tell the time with quarter past and quarter to	• To tell the time to the minute • To use start and end times in hours and minutes • To solve problems with time
	Shape (lesson 7-10)	**Vocab: pentagonal, hexagonal, octagonal, quadrilateral, right-angled, parallel, perpendicular, hemisphere**
	Required prior knowledge Children should know: • Count sides and vertices on a 2D shapes • Find lines of symmetry on shapes • Count faces, edges and vertices on 3D shapes	End point • To recognise and describe 2-D shapes • To recognise and describe 3-D shapes
	Length (lesson 5-9)	**Vocab: millimetre, kilometre, mile, distance apart, between, from, perimeter**
	Required prior knowledge Children should know: • To order lengths and heights in centimetres and metres	End point • To compare lengths • To add lengths • To subtract lengths
	Addition and Subtraction (lesson 11-18)	**Vocab: hundred boundary, addition, altogether, subtract**
	Required prior knowledge Children should know: • Number bonds to 100 in tens • Add three one digit numbers • Add across a 10 • Subtract a 1 digit number from a 2 digit number (across a 10) • Add and subtract 10s • Add and subtract two 2-digit numbers across a 10	End point • To add two numbers across a 10 and a 100 • To subtract two numbers across a 10 and a 100
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	Addition and Subtraction (lesson 19-22)	**Vocab: hundred boundary, addition, altogether, subtract**
	Required prior knowledge Children should know:	End point • To estimate answers • To use the inverse operations

	• Number bonds to 100 in tens • Add three one digit numbers • Add across a 10 • Subtract a 1 digit number from a 2 digit number (across a 10) • Add and subtract 10s • Add and subtract two 2-digit numbers across a 10	
	Multiplication and Division (B)	**Vocab: factor, product, remainder**
	Required prior knowledge Children should know: • Add equal groups • Make equal groups • To know their 2, 5 and 10 times tables • To know odd and even numbers • To divide by 10 and 5	End point • To multiply a 2-digit number by a 1-digit number • To divide a 2-digit number by a 1-digit number
	Fractions (B)	**Vocab: factor, product, remainder**
	Required prior knowledge Children should know: • Find a half, quarter and a third • Recognise the equivalence of a half and a quarter • Recognise and find three-quarters	End point • To add and subtraction fractions • To reason with fractions of an amount
	Capacity (lesson 7-11)	**Vocab: litre, half litre, millilitre, capacity, volume**
	Required prior knowledge Children should know: • Measure in grams and kilograms • Measure in millimetres and litres • To compare and order different temperatures	End point • To measure capacity • To find equivalent capacities and volume • To compare capacity and volume
	Statistics	**Vocab: chart, frequency table, Carroll diagram, Venn diagram, axis, axes, diagram**
	Required prior knowledge Children should know: • To make tally charts	End point • To interpret and draw pictograms • To interpret and draw bar charts

	• To draw and interpret pictograms in 1s • To draw and interpret pictograms in 2s, 5s and 10s	• To use two-way tables
	Money (lesson 1-6)	**Vocab: bought, penny, pound, cost**
	Required prior knowledge Children should know: • Choose notes and coins to make the same amount • To calculate with money to make a pound • To calculate with money to find change	End point • To convert pounds and pence • To add and subtract money • To find change
Y4	**AUTUMN**	
	Place Value	**Vocab: thousand, next, consecutive, integer**
	Required prior knowledge Children should know: • To partition 100 • To order and compare numbers to 1000	End point • To estimate on a number line to 10,000 • To order numbers to 10,000 • To round to the nearest 10, 100, 1,000
	Addition and Subtraction	**Vocab: tens boundary, inverse**
	Required prior knowledge Children should know: • To add 1s and 10s across a 100 • To subtract 1s and 10s across a 100 • To add two numbers across a 10 and a 100 • To subtract two numbers across a 10 and a 100 • To estimate answers • To use the inverse operations	End point • To add 4-digit numbers with more than one exchange • To subtract 4-digit numbers with more than one exchange • To estimate answers
	Perimeter	**Vocab: unit, edge, perimeter**
	Required prior knowledge Children should know: • To measure in metres, centimetres and millimetres • To measure and calculate perimeter • To compare lengths • To add lengths	End point • To find a perimeter of rectilinear shapes • To find missing lengths • To find the perimeter of polygons

	• To subtract lengths	
	Multiplication and Division	**Vocab: inverse, squared, cubed, product, factor**
	Required prior knowledge Children should know: • To multiply a number by 10 • To divide a number by 10 • To multiply a 2-digit number by a 1-digit number • To divide a 2-digit number by a 1-digit number	End point • To multiply by 1 and 0 • To multiply three numbers
	Area	**Vocab: area, covers, centimetre squared**
	Required prior knowledge Children should know: *This is new learning.*	End point • To count squares to find an area • To compare areas
	Time	**Vocab: leap year, millennium, noon, date of birth, arrive, depart**
	Required prior knowledge Children should know: • To tell the time to the minute • To use start and end times in hours and minutes • To solve problems with time	End point • To convert between analogue and digital times • To convert to and from the 24 hour clock
	SPRING	
	Fractions (lesson 1-10)	**Vocab: hundredths, decimal, decimal fraction, proportion**
	Required prior knowledge Children should know: • To compare and order non-unit fractions • To find equivalent fractions on a number line • To add and subtraction fractions • To reason with fractions of an amount	End point • To compare and order mixed number fractions • To convert between mixed number fractions and improper fractions • To find equivalent fractions on a number line
	Decimals (A lesson 1-10, B lesson 1-8)	**Vocab: decimal, decimal fraction, decimal place, decimal equivalent**

	Required prior knowledge Children should know: *This is new learning.*	End point • To divide a number by 10 • To find hundredths as fractions and decimals • To compare and order decimals
	Multiplication and Division (B)	**Vocab: inverse, squared, cubed, product, factor**
	Required prior knowledge Children should know: • To multiply a number by 10 • To divide a number by 10 • To multiply a 2-digit number by a 1-digit number • To divide a 2-digit number by a 1-digit number	End point • To multiply and divide by 10 and 100 • To multiply a 3-digit number by a 1-digit numbers • To divide a 3-digit number by a 1-digit number
	Addition and Subtraction to 1.d.p (not WR)	**Vocab: decimal, decimal fraction, decimal place**
	Required prior knowledge Children should know: • To add 1s and 10s across a 100 • To subtract 1s and 10s across a 100 • To add two numbers across a 10 and a 100 • To subtract two numbers across a 10 and a 100 • To estimate answers • To use the inverse operations	End point • To add decimals to one decimal point • To subtract decimals to one decimal point
	SUMMER	
	Addition and Subtraction to 2.d.p (lesson 11-15)	**Vocab: decimal, decimal fraction, decimal place**
	Required prior knowledge Children should know: • To add 1s and 10s across a 100 • To subtract 1s and 10s across a 100 • To add two numbers across a 10 and a 100 • To subtract two numbers across a 10 and a 100 • To estimate answers • To use the inverse operations	End point • To add decimals to two decimal point • To subtract decimals to two decimal point

	Money	**Vocab: bought, penny, pound, cost**
	Required prior knowledge Children should know: • To convert pounds and pence • To add and subtract money • To find change	End point • To compare amounts of money • To estimate with money • To calculate with money
	Shape	**Vocab: line, construct, centre, angle, right-angled, square-based, reflect, regular, irregular, tetrahedron, polyhedron**
	Required prior knowledge Children should know: • To recognise and describe 2-D shapes • To recognise and describe 3-D shapes	End point • To identify, compare and order angles • To find lines of symmetry
	Fractions (lesson 11-15)	**Vocab: hundredths, equal, parts**
	Required prior knowledge Children should know: • To compare and order non-unit fractions • To find equivalent fractions on a number line • To add and subtraction fractions • To reason with fractions of an amount	End point • To add fractions and mixed numbers • To subtract two fractions • To subtract from mixed numbers
	Statistics	**Vocab: survey, questionnaire, data**
	Required prior knowledge Children should know: • To interpret and draw pictograms • To interpret and draw bar charts • To use two-way tables	End point • To interpret charts • To interpret line graphs • To draw line graphs
	Position and Direction	**Vocab: north-east, north-west, south-east, south-west, translate, rotate, degree, reflection, compass**
	Required prior knowledge	End point

	Children should know: •	• To plot coordinates • To draw 2-D shapes on a grid • To translate shapes on a grid
Y5	**AUTUMN**	
	Place value (lesson 2-14)	**Vocab: factor pair, ascending order, descending order**
	Required prior knowledge Children should know: • To estimate on a number line to 10,000 • To order numbers to 10,000 • To round to the nearest 10, 100, 1,000	End point • Read and write numbers to 1,000,000 • 10/100/1,000/10,000/100,000 more or less • Compare and order numbers to 1,000,000 • Round within 1,000,000
	Decimals (lesson 1, 6, 11)	**Vocab: thousandths, round**
	Required prior knowledge Children should know: • To divide a number by 10 • To find hundredths as fractions and decimals • To compare and order decimals	End point • To write thousandths as decimals • Round to 1 decimal place
	Addition and subtraction	**Vocab: ones boundary, tenths boundary, inverse**
	Required prior knowledge Children should know: • To add 4-digit numbers with more than one exchange • To subtract 4-digit numbers with more than one exchange • To estimate answers • To add decimals to one decimal point • To subtract decimals to one decimal point • To add decimals to two decimal point • To subtract decimals to two decimal point	End point • Add whole numbers with more than four digits • Subtract whole numbers with more than four digits • Use inverse operations
	Perimeter (lesson 1-3)	**Vocab: edge, perimeter, rectilinear, polygon**
	Required prior knowledge Children should know: • To find a perimeter of rectilinear shapes	End point • Find perimeter of rectilinear shapes • Find perimeter of polygons

	• To find missing lengths • To find the perimeter of polygons	
	Multiplication and division **Properties of number** (lesson 1-7)	**Vocab: product, divisibility, square number, prime number, common multiple, common factor**
	Required prior knowledge Children should know: • To multiply and divide by 10 and 100 • To multiply a 3-digit number by a 1-digit numbers • To divide a 3-digit number by a 1-digit number	End point • To find common multiples • To find common factors • To know prime, square and cube numbers
	Multiplication and divide (lesson 8-9)	**Vocab: product, divisibility, square number, prime number, common multiple, common factor**
	Required prior knowledge Children should know: • To multiply and divide by 10 and 100 • To multiply a 3-digit number by a 1-digit numbers • To divide a 3-digit number by a 1-digit number	End point • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000
	Area (lesson 4-6) **Volume**	**Vocab: square metre, square millimetre, area, estimate**
	Required prior knowledge Children should know: • To count squares to find an area • To compare areas	End point • Find area of compound shapes • Estimate volume • Estimate capacity
	SPRING	
	Place value (lesson 1) **Negative Numbers**	**Vocab: integer, positive, negative**
	Required prior knowledge Children should know: • To estimate on a number line to 10,000 • To order numbers to 10,000 • To round to the nearest 10, 100, 1,000	End point • To know roman numerals to 1,000 • Count through zero in multiples • Compare and order negative numbers

	Multiplication and division B (lesson 1, 7 and 8)	**Vocab: product, divisibility, square number, prime number, common multiple, common factor**
	Required prior knowledge Children should know: • To multiply and divide by 10 and 100 • To multiply a 3-digit number by a 1-digit numbers • To divide a 3-digit number by a 1-digit number	End point • Multiply a 4-digit number by a 1-digit number • Divide a 4-digit number by a 1-digit number
	Fractions A (lesson 1-8)	**Vocab: proper/improper fractions, equivalent, reduced to, cancel, thousandths**
	Required prior knowledge Children should know: • To compare and order mixed number fractions • To convert between mixed number fractions and improper fractions • To find equivalent fractions on a number line • To add fractions and mixed numbers • To subtract two fractions • To subtract from mixed numbers	End point • Recognise equivalent fractions • Convert between mixed number fractions and improper fractions • Compare and order fractions
	Decimals (lesson 2-5, 7-10)	**Vocab: thousandths, round, equivalent**
	Required prior knowledge Children should know: • To divide a number by 10 • To find hundredths as fractions and decimals • To compare and order decimals	End point • Find equivalent fractions and decimals • Order and compare decimals up to 3 decimal places • Round to the nearest whole number
	Percentages (lesson 12-15)	**Vocab: in every, for every percentage, per cent, %**
	Required prior- knowledge Children should know: *This is new learning.*	End point • To show percentages as fractions • To show percentages as decimals
	Converting units	**Vocab: pint, gallon, equivalent**
	Required prior knowledge	End point

	Children should know: *This is new learning.*	• Convert units of length • Convert units of time • Convert between metric and imperial units
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	Multiplication and division B (lesson 2-11)	**Vocab: product, divisibility, square number, prime number, common multiple, common factor**
	Required prior knowledge Children should know: • To multiply and divide by 10 and 100 • To multiply a 3-digit number by a 1-digit numbers • To divide a 3-digit number by a 1-digit number	End point • Multiply a 4-digit number by a 2-digit number • Solve problems with multiplication • Divide with remainders
	Fractions (A - lesson 9-17, B - lesson 1-7)	**Vocab: proper/improper fractions, equivalent, reduced to, cancel, thousandths**
	Required prior knowledge Children should know: • To compare and order mixed number fractions • To convert between mixed number fractions and improper fractions • To find equivalent fractions on a number line • To add fractions and mixed numbers • To subtract two fractions • To subtract from mixed numbers	End point • Add and subtract two mixed numbers • Multiply a mixed number by an integer • Find the fraction of an amount
	Shape	**Vocab: x-axis, y-axis, quadrant, octahedron**
	Required prior knowledge Children should know: • To identify, compare and order angles • To find lines of symmetry	End point • Measure angles up to 180 degrees • Draw lines and angles accurately • Identify regular and irregular polygons
	Statistics	**Vocab: bar line chart, line graph, maximum value, minimum value, outcome**
	Required prior knowledge	End point

	Children should know: • To interpret charts • To interpret line graphs • To draw line graphs	• Draw line graphs • Read and interpret line graphs and tables
	Statistics - Time	**Vocab: a.m, p.m, timetable, interpret**
	<u>Required prior knowledge</u> Children should know: • To convert between analogue and digital times • To convert to and from the 24 hour clock	<u>End point</u> • Read and interpret timetables
	Position and direction	**Vocab: coordinate, translate, reflect, horizontal, vertical, protractor**
	<u>Required prior knowledge</u> Children should know: • To plot coordinates • To draw 2-D shapes on a grid • To translate shapes on a grid	<u>End point</u> • Read and plot coordinates • Translations with coordinates • Reflection in horizontal and vertical lines
Y6	**AUTUMN**	
	Place Value	**Vocab:**
	<u>Required prior knowledge</u> Children should know: • Read and write numbers to 1,000,000 • 10/100/1,000/10,000/100,000 more or less • Compare and order numbers to 1,000,000 • Round within 1,000,000	<u>End point</u> • To read and write numbers to 10,000,000 • To find powers of 10 • To round any integer • To understand negative numbers
	Place Value of Decimals (Decimals lesson 1-3)	**Vocab:**
	<u>Required prior knowledge</u> Children should know: • To write thousandths as decimals • Round to 1 decimal place	<u>End point</u> • To round decimals

	Addition and Subtraction (A/S/M/D lesson 1 and revisit)	**Vocab:**
	Required prior knowledge Children should know: • Add whole numbers with more than four digits • Subtract whole numbers with more than four digits • Use inverse operations	End point • To add integers • To subtract integers
	Properties of number (A/S/M/D lesson 2-6)	**Vocab: factorise, prime factor, digit total**
	Required prior knowledge Children should know: • To find common multiples • To find common factors • To know prime, square and cube numbers	End point • To find common factors • To find common multiples • To know prime, square and cube numbers
	Area, Perimeter and Volume	**Vocab: cubic millimetres, cubic metres**
	Required prior knowledge Children should know: • Find perimeter of rectilinear shapes • Find perimeter of polygons • Find area of compound shapes • Estimate volume • Estimate capacity	End point • To find the area of any triangle • To find the area of a parallelogram • To find the volume of a cuboid
	Multiplication and Division (A/S/M/D lesson 7-14)	**Vocab:**
	Required prior knowledge Children should know: • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply a 4-digit number by a 1-digit number • Divide a 4-digit number by a 1-digit number • Multiply a 4-digit number by a 2-digit number • Solve problems with multiplication • Divide with remainders	End point • To multiply a 4-digit number by a 2-digit number • To use long division with remainders • To solve multi-step problems

	SPRING	
	Fractions (A & B)	**Vocab:**
	Required prior knowledge Children should know: • Recognise equivalent fractions • Convert between mixed number fractions and improper fractions • Compare and order fractions • Add and subtract two mixed numbers • Multiply a mixed number by an integer • Find the fraction of an amount	End point • To add and subtract mixed number fractions • To multiply fractions by an integer • To divide fractions by an integer • To find a fraction of an amount
	Decimals (lesson 4-9)	**Vocab:**
	Required prior knowledge Children should know: • Find equivalent fractions and decimals • Order and compare decimals up to 3 decimal places • Round to the nearest whole number	End point • To add and subtract decimals • To multiply decimals by integers • To divide decimals by integers
	Division (A/S/M/D revisit lesson 9-13)	**Vocab:**
	Required prior knowledge Children should know: • Divide by 10, 100 and 1,000 • Divide a 4-digit number by a 1-digit number • Divide with remainders	End point • To use long division with remainders • To solve problems with division
	Algebra	**Vocab: formula, formulae, equation, unknown, variable**
	Required prior knowledge Children should know: *This is new learning.*	End point • To use substitution • To form equations • To solve 2-step equations
	Order of operations (A/S/M/D lesson 15-17)	**Vocab:**

	Required prior knowledge Children should know: *This is new learning.*	End point • To know the order of operations • To use mental calculations • To use mental estimations
	Ratio	**Vocab: ratio**
	Required prior knowledge Children should know: *This is new learning.*	End point • To use ratio language • To use the scale factor • To solve ratio and proportion problems
	SUMMER	
	Measures (Converting units and through A/S/M/D)	**Vocab: yard, foot, feet, inch, inches, circumference, tonne, pound, ounce**
	Required prior knowledge Children should know: *This is new learning.*	End point • To convert metric measures • To calculate with metric measures
	Position and Direction	**Vocab: intersecting, circumference, net, reflex angle**
	Required prior knowledge Children should know: • Read and plot coordinates • Translations with coordinates • Reflection in horizontal and vertical lines	End point • To read and plot points in the four quadrants • To complete translations of a shape • To complete reflections of a shape
	Statistics	**Vocab: pie chart, mean, median, mode, range, statistics, distribution**
	Required prior knowledge Children should know: • Draw line graphs • Read and interpret line graphs and tables	End point • To read and interpret pie charts • To draw pie charts • To find the mean
	SATs Preparation	

	Mathematical Curiosity - Problem Solving and Reasoning