

Au	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	
Y1	Number – Place Value <ul style="list-style-type: none">Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.Count, read and write numbers to 20 in numerals and wordsGiven a number, identify one more or one lessIdentify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, leastRead and write numbers from 1 to 20 in numerals and words				Number – Addition & Subtraction <ul style="list-style-type: none">Represent and use number bonds and related subtraction facts within 20Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signsAdd and subtraction one digit numbers to 20, including zeroSolve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems				Geometry: Shape <ul style="list-style-type: none">Recognise and name common 2D shapes, including rectangles (including squares), circles and trianglesRecognise and name common 3D shapes, including: cuboids, pyramids and spheres		Measurement: Money <ul style="list-style-type: none">Recognise and know the value of different denominations of coins and notes		
Y2	Number – Place Value <ul style="list-style-type: none">Read and write numbers to at least 100 in numerals and in wordsRecognise the place value of each digit in a 2-digit number (TU)Identify, represent and estimate numbers using different representations including the number lineCompare and order numbers from 0 to 100; use <> and = signsUse place value and number facts to solve problems				Number – Addition & Subtraction <ul style="list-style-type: none">Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100Add and subtract numbers using concrete objects, pictorial representations and mentally, including: a 2-digit number and ones; a 2-digit and tens; two 2-digit numbers; adding three 1-digit numbersSolve problems with addition and subtraction: using concrete objects, pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methodsShow that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannotRecognise the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems				Geometry: Shape <ul style="list-style-type: none">Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical lineIdentify and describe the properties of 3D shapes, including the number of edges, vertices and facesIdentify 2D shapes on the surface of 3D shapesCompare and sort common 2D and 3D shapes and everyday objects		Measurement: Money <ul style="list-style-type: none">Recognise and use symbols for pounds and pence; combine amounts to make a particular valueFind different combinations of coins that equal the same amounts of moneySolve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change		
Y3	Number – Place Value <ul style="list-style-type: none">Read and write numbers up to 1000 in numerals and in wordsIdentify, represent and estimate numbers using different representationsfind 10 or 100 more or less than a given numberRecognise the place value of each digit in a three-digit number (HTU)Compare and order numbers up to 1000Count from 0 in multiples of 50 and 100Solve number problems and practical problems involving these ideas				Number – Addition & Subtraction <ul style="list-style-type: none">Add and subtract numbers mentally, including a three-digit number and ones; a three-digit number and tens; a three-digit number and hundredsAdd and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.Estimate the answer to a calculation and use inverse operations to check answersSolve problems including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence in which n objects are connected to m objects.				Number – Multiplication & Division <ul style="list-style-type: none">Count from 0 in multiples of 4 and 8Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tablesWrite and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methodsSolve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects		Consolidation		
Y4	Number – Place Value <ul style="list-style-type: none">Count in multiples of 25 and 1000Identify, represent and estimate numbers using different representationsFind 1000 more or less than a given numberCount backwards through zero to include negative numbersRecognise the place value of each digit in a 4-digit numberOrder and compare numbers beyond 1000Round any number to the nearest 10, 100 or 1000Solve number and practical problems that involve all of the above and with increasingly large positive numbersRead Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place valueRound decimals with one decimal place to the nearest whole number				Number – Addition & Subtraction <ul style="list-style-type: none">Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtractionEstimate and use inverse operations to check answers to a calculationSolve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why				Number – Multiplication & Division <ul style="list-style-type: none">Count in multiples of 6, 7 and 9Recall multiplication and division facts for multiplication tables up to 12 x 12Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbersSolve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects		Consolidation		
Y5	Number – Place Value <ul style="list-style-type: none">Read, write, order and compare numbers to at least 1 million and determine the value of each digitCount forwards and backwards in steps of powers of 10 for any given number up to 1 millionInterpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zeroRound any number up to 1 million to the nearest 10, 100, 1000, 10000 and 100,000Solve number problems and practical problems that involve all of the aboveRead Roman numerals to 1000 (M)and recognise years written in Roman numerals			Number – Addition & Subtraction <ul style="list-style-type: none">Add and subtract numbers mentally with increasingly large numbersAdd and subtract whole numbers with more than 4 – digits, including using formal written methodsUse rounding to check answers to calculations and determine, in the context of a problem, levels of accuracySolve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why			Number – Multiplication & Division <ul style="list-style-type: none">Multiply and divide numbers mentally drawing upon known factsMultiply whole numbers by 10, 100 and 1000Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbersMultiply numbers up to 4-digits by a one or two digit number using a formal written method, including long multiplication for 2-digit numbersDivide numbers up to 4-digits by a one or two digit number using a formal written method of short division and interpret remainders appropriately for the contextSolve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of equals sign			Statistics <ul style="list-style-type: none">Solve comparison, sum and difference problems using information presented in a line graphComplete, read and interpret information in tables including timetables		Measurement: Perimeter, area and volume <ul style="list-style-type: none">Measure and calculate the perimeter of composite rectilinear shapes in cm and mCalculate and compare the area of rectangles (including squares), and using standard units, estimate the area of irregular shapesEstimate volume and capacity	
Y6	Number – Place Value <ul style="list-style-type: none">Read, write, order and compare numbers up to ten million and determine the value of each digitIdentify the value of each digit to three decimal placesUse negative numbers in context, and calculate intervals across zeroRound any whole number to a required degree of accuracySolve number and practical problems that involve all of the above			Number – Addition & Subtraction <ul style="list-style-type: none">Perform mental calculations, including with mixed operations and large numbersUse estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracySolve addition and subtraction multi-step problems, deciding which operations and methods to use and why			Number – Multiplication & Division <ul style="list-style-type: none">Identify common factors, common multiples and prime numbersMultiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplicationMultiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal placesDivide numbers up to 4-digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the contextUse written division methods in cases where the answer has up to 2dp			Statistics <ul style="list-style-type: none">Interpret and construct pie charts and line graphs and use these to solve problemsIllustrate and name parts of circles, including radius diameter and circumference and know that diameter is twice the radiusCalculate the mean as an average		Measurement: Perimeter, area and volume <ul style="list-style-type: none">Recognise that shapes with the same areas can have different perimeters and vice versaRecognise when it is possible to use formulae for area and volume of shapesCalculate the area of parallelograms and trianglesCalculate, estimate and compare volume of cubes and cuboids using standard units and extending to other units	

Whole school mathematics plan (based on White Rose small steps progression). The number of weeks is a guideline only; teachers should use their professional judgement and only move on to the next ‘theme’ when the majority of children (not including SEND) have met the set of national curriculum objectives covered. Likewise, objectives may need to be revisited at a later date if the attainment is not yet secure. Children who have been judged as secure for a specific learning objective will be challenged to work at greater depth. They will be given a rich experience using routine and non-routine questions. It is the aim that all activities will flow with a clear progression towards mastery.

Sp	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	WK12	
Y1	Number: Place Value and multiplication and division <ul style="list-style-type: none">Count to 50 forwards and backwards, beginning with 0 or 1, or from any numberCount, read and write numbers to 50 in numeralsGiven a number, identify one more or one lessCount in multiples of twos, fives and tensRead and write numbers from 1 to 20 in numerals and wordsSolve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher				Number: Fractions <ul style="list-style-type: none">Recognise, find and name a half as one of two equal parts of an object, shape or quantityRecognise, find and name a quarter as one of four equal parts of an object, shape or quantity			Measurement: Length & Height <ul style="list-style-type: none">Measure and begin to record lengths and heightsCompare, describe and solve practical problems: lengths and heights		Measurement: Weight & Volume <ul style="list-style-type: none">Measure and begin to record mess/weight, capacity and volumeCompare, describe and solve practical problems: mass and weightCompare, describe and solve practical problems: capacity and volume		Consolidation	
Y2	Number: Place Value and multiplication and division <ul style="list-style-type: none">Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backwardRecall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbersCalculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signsShow that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannotSolve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts				Number: Fractions <ul style="list-style-type: none">Recognise, find, name and write fractions 1/3, 1/4, 2/4, and 3/4 of a length, shape, set of objects or quantityWrite simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2			Measurement: Length & Height <ul style="list-style-type: none">Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels: length/height in any direction (m/cm);Compare and order: Lengths and record the results using >, < and =		Measurement: Weight & Volume <ul style="list-style-type: none">Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels: mass (kg/g); capacity (litres/ml), temperature (C) and volumeCompare and order: Volume and capacity recording the results using >, < and =		Consolidation	
Y3	Number: Multiplication and division <ul style="list-style-type: none">Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to written methodsSolve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects		Measurement: Length, perimeter and area <ul style="list-style-type: none">Measure, compare, add and subtract: lengths (m/cm/mm);Measure the perimeter of simple 2-D shapesContinue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed and simple equivalents of mixed units		Fractions <ul style="list-style-type: none">Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominatorsRecognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominatorsCount up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10Recognise and show, using diagrams, equivalent fractions with small denominatorsAdd and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]				Fractions <ul style="list-style-type: none">Compare and order unit fractions, and fractions with the same denominatorsSolve problems that involve all of the above				Consolidation
Y4	Number: Multiplication and division <ul style="list-style-type: none">Multiply two-digit and three-digit numbers by a one-digit number using formal written layoutSolve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objectsRecognise and use factor pairs and commutativity in mental calculations		Measurement: Length, perimeter and area <ul style="list-style-type: none">Convert between different units of measureMeasure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metresFind the area of rectilinear shapes by counting squares		Fractions <ul style="list-style-type: none">Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole numberCount up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by tenRecognise and show, using diagrams, families of common equivalent fractionsAdd and subtract fractions with the same denominator				Fractions <ul style="list-style-type: none">Recognise and write decimal equivalents of any number of tenths or hundredthsRecognise and write decimal equivalents to ¼, ½, ¾Round decimals with one decimal place to the nearest whole numberCompare numbers with the same number of decimal places up to two decimal places				Consolidation
Y5	Fractions <ul style="list-style-type: none">Compare and order fractions whose denominators are all multiples of the same numberIdentify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredthsRecognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 11/5].Add and subtract fractions with the same denominator and multiples of the same numberMultiply proper fractions and mixed numbers by whole numbers, supported by materials and diagramsRead and write decimal numbers as fractionsSolve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates					Decimals and percentages <ul style="list-style-type: none">Read, write, order and compare numbers with up to three decimal placesRecognise and use thousandths and relate them to tenths, hundredths and decimal equivalentsMultiply and divide whole numbers and those involving decimals by 10, 100 and 1000Round decimals with two decimal places to the nearest whole number and to one decimal place.Solve problems involving numbers up to three decimal placesRecognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimalSolve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25					Multiplication & Division (RECAP) <ul style="list-style-type: none">Recognise and use square numbers and cube numbers and the notation squared (²) and cubed (³)Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbersEstablish whether a number up to 100 is prime and recall prime numbers up to 19Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes		
Y6	Fractions <ul style="list-style-type: none">Compare and order fractions, including fractions >1Use common factors to simplify fractions; use common multiples to express fractions in the same denominationAdd and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractionsMultiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = 1/8]Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [e.g. 3/8]					Decimals and percentages <ul style="list-style-type: none">Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal placesSolve problems which require answers to be rounded to specified degrees of accuracyMultiply one-digit numbers with up to two decimal places by whole numbersUse written division methods in cases where the answer has up to two decimal placesSolve problems involving the calculation of percentages and the use of percentages for comparisonRecall and use equivalences between simple fractions, decimals and percentages, including in different contexts					Algebra & Ratio <ul style="list-style-type: none">Use simple formulaeGenerate and describe linear number sequencesExpress missing number problems algebraicallyFind pairs of numbers that satisfy an equation with two unknownsEnumerate possibilities of combinations of two variablesSolve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division factsSolve problems involving similar shapes where the scale factor is known or can be foundSolve problems involving unequal sharing and grouping using knowledge of fractions and multiples		

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Y1	Number: Place Value <ul style="list-style-type: none">Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given numberCount, read and write numbers to 100 in numeralsGiven a number, identify one more and one lessRead and write numbers from 1 to 20 in numerals and wordsIdentify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least		Geometry: Position & Direction <ul style="list-style-type: none">Describe position, direction and movement, including whole, half, quarter and three-quarter turns		Problem solving & efficient methods		Measurement: Time <ul style="list-style-type: none">Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]Recognise and use language relating to dates, including days of the week, weeks, months and yearsTell the time to the hour and half past the hour and draw the hands on a clock face to show these timesCompare, describe and solve practical problems for timeMeasure and begin to record time (hours, minutes, seconds)			Investigations		Consolidation	
Y2	Statistics <ul style="list-style-type: none">Interpret and construct simple pictograms, tally charts, block diagrams and simple tablesAsk and answer simple questions by counting the number of objects in each category and sorting the categories by quantityAsk and answer questions about totalling and comparing categorical data		Geometry: Position & Direction <ul style="list-style-type: none">Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)Order and arrange combinations of mathematical objects in patterns and sequences		Problem solving & efficient methods		Measurement: Time <ul style="list-style-type: none">Know the number of minutes in an hour and number of hours in a dayTell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these timesCompare and sequence intervals of time			Investigations			
Y3	Measurement: Money <ul style="list-style-type: none">Add and subtract amounts of money to give change, using both £ and p in practical contexts		Statistics <ul style="list-style-type: none">Interpret and present data using bar charts, pictograms and tablesSolve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables		Measurement: Time <ul style="list-style-type: none">Tell and write the time from an analogue clock and 12-hour and 24-hour clocks; an analogue clock, including using Roman numerals from I to XII.Estimate and read time with increasing accuracy to the nearest minuteRecord and compare time in terms of seconds, minutes, and hoursUse vocabulary such as a.m./p.m., morning, afternoon, noon and midnightKnow the number of seconds in a minute and the number of days in each month, year and leap yearCompare durations of events [for example to calculate the time taken by particular events or tasks]			Geometry: Properties of shape <ul style="list-style-type: none">Recognise angles as a property of shape or a description of a turnIdentify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angleIdentify horizontal and vertical lines and pairs of perpendicular and parallel linesDraw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them			Measurement: volume & capacity <ul style="list-style-type: none">Measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml)		
Y4	Measurement: Money <ul style="list-style-type: none">Estimate, compare and calculate different measures, including money in pounds and penceSolve simple measure and money problems involving fractions and decimals to two decimal places		Statistics <ul style="list-style-type: none">Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphsSolve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs		Measurement: Time <ul style="list-style-type: none">Read, write and convert time between analogue and digital 12 and 24-hour clocksConvert between different units of measure e.g. hour to minuteSolve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days			Geometry: Properties of shape <ul style="list-style-type: none">Identify acute and obtuse angles and compare and order angles up to two right angles by sizeIdentify lines of symmetry in 2-D shapes presented in different orientationsComplete a simple symmetric figure with respect to a specific line of symmetryCompare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes			Coordinates <ul style="list-style-type: none">Describe positions on a 2-D grid as co-ordinates in the first quadrantDescribe movements between positions as translations of a given unit to the left/right and up/downPlot specified points and draw sides to complete a given polygon		
Y5	Measuring – converting units		Geometry – position & direction <ul style="list-style-type: none">Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Geometry – properties of shapes and angles <ul style="list-style-type: none">Identify 3-D shapes, including cubes and other cuboids, from 2-D representationsUse the properties of rectangles to deduce related facts and find missing lengths and anglesDistinguish between regular and irregular polygons based on reasoning about equal sides and anglesKnow angles are measured in degrees: estimate and compare acute, obtuse and reflex anglesDraw given angles, and measure them in degrees (0)Identify: angles at a point and one whole turn (total 360°); angles at a point on a straight line and 1/2 a turn (total 180°); other multiples of 90°			Investigations						
Y6	Measuring – converting units		Geometry – position & direction <ul style="list-style-type: none">Describe positions on the full co-ordinate grid (all four quadrants)Draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes	Geometry – properties of shapes and angles <ul style="list-style-type: none">Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygonsDraw 2-D shapes using given dimensions and anglesRecognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles			Investigations						

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