AUTUMN 1					
		Year 3	Year 4	Year 5	Year 6
Week 1 /2	Place Value	Read and write numbers up to 1000 in numerals and in words • Read and write numbers with one decimal place • Identify, represent and estimate numbers using different representations (including the number line) • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Identify the value of each digit to one decimal place • Partition numbers in different ways (e.g. 146 = 100+ 40+6 and 146 = 130+16) • Compare and order numbers up to 1000 • Compare and order numbers with one decimal place • Find 1, 10 or 100 more or less than a given number • Round numbers to at least 1000 to the nearest 10 Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer • Describe and extend number sequences involving counting on or back in different steps Solve problems involving all of above	Count in multiples of 6, 7, 9, 25 and 1000 • Count backwards through zero to include negative numbers • Count up and down in hundredths • Read and write numbers to at least 10 000 • Read and write numbers with up to two decimal places • Recognise the place value of each digit in a four-digit number • Identify the value of each digit to two decimal places • Partition numbers in different ways (e.g. 2.3 = 2+0.3 & 1+1.3) • Identify, represent and estimate numbers using different representations (including the number line) • Order and compare numbers beyond 1000 • Order and compare numbers with the same number of decimal places up to two decimal places • Find 0.1, 1, 10, 100 or 1000 more or less than a given number • Round any number to the nearest 10, 100 or 1000 • Round decimals (one decimal place) to the nearest whole number • Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer • Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division step Solve number and practical problems that involve all of the above and with increasingly large positive number	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Read, write, order and compare numbers with up to 3 decimal places • Identify the value of each digit to three decimal places • Identify represent and estimate numbers using the number line • Find 0.01, 0.1, 1, 10, 100, 100 and other powers of 10 more or less than a given number • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • Round decimals with two decimal places to the nearest whole number and to one decimal place • Multiply/divide whole numbers and decimals by 10, 100 and 1000 • Describe and extend number sequences including those with multiplication/division steps and where the step size is a decimal (M); recognise years written as such • Solve number and practical problems that involve all of the above	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit • Identify the value of each digit to three decimal places • Identify, represent and estimate numbers using the number line • Order and compare numbers including integers, decimals and negative numbers • Find 0.001, 0.01, 0.1, 1, 10 and powers of 10 more/less than a given number • Round any whole number to a required degree of accuracy • Round decimals with three decimal places to the nearest whole number or one or two decimal places • Solve number and practical problems that involve all of the above
Week 3 and 4	Addition / Subtraction	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation • Understand and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context • Recall/use	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation • Recall and use addition and subtraction facts for 100 • Recall and use +/- facts for multiples of 100 totalling 1000	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation • Recall and use addition and subtraction facts for 1 and 10 (with	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers in the calculation • Recall and use addition and subtraction facts for 1 (with decimals to two decimal places)

		addition/subtraction facts for 100 (multiples of 5 and 10) • Derive and use addition and subtraction facts for 100 • Derive and use addition and subtraction facts for multiples of 100 totalling 1000 • Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	• Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place) • Add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place • Add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate • Estimate; use inverse operations to check answers to a calculation • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why • Solve addition and subtraction problems involving missing numbers	decimal numbers to one decimal place) • Derive and use addition and subtraction facts for 1 (with decimal numbers to two decimal places) • Add and subtract numbers mentally with increasingly large numbers and decimals to two decimal places • Add and subtract whole numbers with more than 4 digits and decimals with two decimal places, including using formal written methods (columnar addition and subtraction) • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve addition and subtraction problems involving missing numbers	• Perform mental calculations including with mixed operations and large numbers and decimals • Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction) • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Use knowledge of the order of operations to carry out calculations • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving all four operations, including those with missing number
Week 5/6	**Multiplication and Division**	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Understand that division is the inverse of multiplication and vice versa • Understand how multiplication and division statements can be represented using arrays • Understand division as sharing and grouping and use each appropriately • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • Derive and use doubles of all numbers to 100 and corresponding halves • Derive and use doubles of all multiples of 50 to 500 • 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 formal written methods • Solve problems, including missing number problems, involving multiplication and	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • • Recall multiplication and division facts for 11 and 9 x tables • Use partitioning to double or halve any number, including decimals to one decimal place • Use place value, known and derived facts to multiply and divide mentally, including: - multiplying by 0 and 1 - dividing by 1 - multiplying together three numbers • Multiply two-digit and three-digit numbers by a one-digit number using formal written layout • Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • Solve problems involving multiplying and adding, including using the distributive law to multiply two digit	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 19 • Recognise and use square (2) and cube (3) numbers, and notation • Use partitioning to double or halve any number, including decimals to two decimal places • Multiply and divide numbers mentally drawing upon known facts • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • Multiply numbers up to 4 digits by a one- or two-digit number using a	Identify common factors, common multiples and prime numbers • Use partitioning to double or halve any number • Perform mental calculations, including with mixed operations and large numbers • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • Multiply one-digit numbers with up to two decimal places by whole numbers • Divide numbers up to 4 digits by a two-digit whole number using the formal written methods of short or long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • Use written division methods in cases where the answer has up to two decimal places

		division (and interpreting remainders), including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	numbers by one digit, division (including interpreting remainders), integer scaling problems and harder correspondence problems such as n objects are connected to m objects	formal written method, including long multiplication for two-digit numbers • Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	• Use knowledge of the order of operations to carry out calculations • Solve problems involving all four operations, including those with missing numbers
Week 7 **Statistics**		Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects • Interpret and present data using bar charts, pictograms and tables • Solve one-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	Use a variety of sorting diagrams to compare and classify numbers and geometric shapes based on their properties and sizes • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, tables • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes) • Complete, read and interpret information in tables and timetables • Solve comparison, sum and difference problems using information presented in all types of graph including a line graph	Continue to complete and interpret information in a variety of sorting diagrams (including sorting properties of numbers and shapes) • Interpret and construct pie charts and line graphs and use these to solve problems #• Solve comparison, sum and difference problems using information presented in all types of graph Ratio and proportion

AUTUMN 2					
		Year 3	Year 4	Year 5	Year 6
Week 1	Y3/4 Multiplication/ Times Tables Y5/6 Fractions	Recall and use multiplication and division facts for the 3, 4 multiplication tables • Derive and use doubles of all numbers to 100 and corresponding halves • Derive and use doubles of all multiples of 50 to 500 Solve problems, including missing number problems, involving multiplication and division (and interpreting remainders), including positive integer scaling problems	Recall multiplication facts for multiplication tables – 11 and 9 • Use partitioning to double or halve any number, including decimals to one decimal place • Use place value, known and derived facts to multiply and divide mentally, including: - multiplying by 0 and 1 - dividing by 1 - multiplying together three numbers • Multiply two-digit and three-digit numbers by a one-digit number using formal written layout • Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit.	• Compare and order fractions whose denominators are all multiples of the same number (including on a number line) • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Compare and order fractions, including fractions > 1 (including on a number line) • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts • Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375 and 3 8) • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Week 2	3D shape	Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • Identify horizontal and vertical lines and pairs of perpendicular and parallel line	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	Recognise mixed numbers and improper fractions and convert from one form to the other • Read and write decimal numbers as fractions (e.g. 0.71 = 71 100) • Count on and back in mixed number steps such as 11 2 • Compare and order fractions whose denominators are all multiples of the same number (including on a number line) • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • Add and subtract fractions with denominators that are the same and that are multiples of the same number (using diagrams)	Solve problems involving the calculation of percentages (e.g. of measures and such as 15% of 260) and the use of percentages for comparison
Week 3	Y3/4 /5 Time Y6- Algebra and Sequences	Estimate/read time with increasing accuracy to the nearest minute • Record/compare time in terms of seconds, minutes, hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, midnight • Know the number of seconds in a minute and the number of days in each month, year and leap year	Read, write and convert time between analogue and digital 12- and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks • Solve problems involving converting between units of time	Use simple formulae • Generate and describe linear number sequences • Express missing number problems algebraically •

Week 4 **Statistics**	**Length and Perimeter (Y3/4/5)** **Algebra and Sequences (Y6)**	Measure, compare, add and subtract: lengths (m/cm/mm) • Understand perimeter is a measure of distance around the boundary of a shape • Measure the perimeter of simple 2-D shapes	Estimate, compare and calculate different lengths • Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • Know area is a measure of surface within a given boundary • Find the area of rectilinear shapes by counting squares	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • Draw given angles, and measure them in degrees (°) Measure/calculate the perimeter of composite rectilinear shapes • Calculate and compare the area of rectangle, use standard units square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes	Find pairs of numbers that satisfy an equation with two unknowns • Enumerate possibilities of combinations of two variables
Week 5		**PROBLEM SOLVING/ ASSESSMENTS**			

SPRING 1					
		Year 3	Year 4	Year 5	Year 6
Week 1 and 2	Number and Place Value	Count in steps of 8 from 0 Count in steps from 0 of 4, 8, 5 and 100 Correctly place multiples of 10 on a number line with multiples of 100 marked but not labelled (with start and end labelled 0 and 1000) Partition a three-digit number without the use of practical equipment into two groups in different ways where one group is a multiple of 10) Find 1, 10 or 100 more than a given number. Compare and order numbers up to 1000 Compare and order numbers to 1 decimal place	Label positive and negative numbers on a demarcated number line (where the counting step is one) Partition numbers with one decimal place without the use of practical equipment into two groups in different ways Correctly place any number on a number line with multiples of 1000 marked but not labelled (with a variety of start and end points e.g. 2500 to 7500) Correctly place multiples of one hundredth (0.01) on a number line with multiples of 0.1 marked but not labelled (with start and end labelled 0 and 1) Order numbers up to 10 000 with different numbers of digits, saying which numbers are greater or less Identify the number one tenth (0.1) more and less than a given number with up to one decimal place, where the ones digit changes e.g. one tenth less than 6	Count forwards and backwards in steps of 10 000 without crossing 100 000 boundaries for any given number up to 1 000 000 Round decimals with two decimal places to the nearest whole number (e.g. 267.62 rounds to 268) Compare numbers up to three decimal places where 0 is not used as a place holder Order numbers up to three decimal places where 0 is not used as a place holder Multiply/divide whole numbers and decimals by 1000 where 0 is used as a place holder, e.g. 33.003 x 1000 or 123 006 ÷ 1000 Count on and back with positive and negative whole numbers through zero Round decimals with two decimal places to the nearest whole number (e.g. 267.62 rounds to 268)	Count forwards or backwards in steps of integers from any number up to 10 000 000 and through zero e.g. 105, 60, 15, -30, -75 (counting in steps of 45) Calculate the difference between two negative numbers Identify the rule of a sequence with inconsistent steps e.g. 1, 3, 6, 10, 15 by adding one more than the previous step size Compare and order negative numbers including in a variety of contexts Round any number up to 10 000 000 to the nearest 10, 100, 1000, 10 000, 100 000 or 1 000 000 Round decimals with three decimal places to the nearest tenth e.g. 327.702 rounds to 327.7
Week 3	Multiplication	. Use partitioning to derive doubles of all numbers to 100, e.g. double 67 is 134 becomes double 60 + double 7 which is 120 + 14 = 134 Recall and use multiplication and division facts for the 8 times table 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	Recall and use multiplication and division facts for the 7 and 12 multiplication table Use appropriate factor pairs and commutativity in mental calculations e.g. 300 x 6 = 3 x 100 x 6 which becomes 3 x 6 x 100 = 18 x 100 Use partitioning to double a number with ones and tenths, e.g. double 6.8 Use inverse to check the answer to a calculation, e.g. 342 x 6 = 2052 can	Identify multiples of 2, 3, 4, 5, 6, 9, 10, 20, 25, 50 and 100 using rules of divisibility Use known facts to derive factors of multiples of 10 and 100, e.g. 240 could be factorised to 6 x 40 Multiply a 3 digit by a 2 digit number using a formal written method Recall prime numbers up to 19	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication Identify common factors, common multiples and prime numbers Use partitioning to double or halve any number

		mental and progressing to formal written methods	be checked by carrying out the following calculation correctly: 2052 ÷ 6 (performed using a calculator as not Y4 expectation)		
Week 4	**Division (Y3/4)** **Fractions (2 Y5/6)**	Use partitioning to derive and use halves of all numbers to 100, e.g. half of 74 can be calculated using either: half of 60 + half of 14 or half of 70 + half of 4 Use a vertical number line to show division as repeated subtraction for numbers beyond the multiplication facts that they know using greater multiples of the divisor e.g. 52 ÷ 4 shown as 52 subtract 40 (10 groups of 4) leaves 12; then subtract 12 (3 groups of 4) so there are 13 groups of 4 in 5	Use partitioning to halve any number with ones and tenths where the tenths digit is even e.g. half of 3.6 could be partitioned into 3 + 0.6 or 2 + 1.6 Divide a two-digit number by a one-digit number using a partitioning strategy e.g. 96 ÷ 4 becomes (80 ÷ 4) + (16 ÷ 4) Divide three-digit numbers by a single digit number using the chunking method, making the calculation more efficient by subtracting more than one multiple of 10 of the divisor e.g. 248 ÷ 4 by subtracting 240 (60 groups of 4) and 8 (2 groups of 4 Use inverse to check the answer to a calculation, e.g. 256 ÷ 4 = 64 can be checked by carrying out the following calculation correctly: 64 x 4	Recognise a mixed number with a fractional part in halves, thirds or quarters and convert it to an improper fraction and vice-versa Add and subtract fractions with denominators that are the same and that are multiples of the same number (using diagrams Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1 4 x 1 2 = 1 8) • Divide proper fractions by whole numbers (e.g. 1 3 ÷ 2 = 1 6) Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Week 5	**Fractions**	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Recognise and show, using diagrams, equivalent fractions with small denominator Solve problems that involve all of the above	Add and subtract fractions with the same denominator (using diagrams) Where a fraction of an amount cannot be found by using known division facts, use pictorial representations, e.g. bar model, to find non-unit fractions of a set of objects, e.g. 3 8 of 112	Solve problems involving fractions and decimals to three places Solve problems which require knowing percentage and decimal equivalents of 1 2 , 1 4 , 1 5 , 2 5 , 4 5 and fractions with a denominator of a multiple of 10 or 25	Solve problems which require answers to be rounded to specified degrees of accuracy

Week 6	**Volume & capacity** **Measure, length, capacity**	Measure mass / volume kg/g m/ ML Compare the mass of different objects Add values of mass (kg/g) / volume (m/ml) Find the difference between the volumes/capacities of vessels and say how much more or how much less one vessel contains than another (l/ml)	Compare the volume/capacity of different objects including numbers to two decimal places Compare the mass of different objects including numbers to two decimal places Measure and compare the length of different objects including numbers to two decimal places	Convert km (up to 3 decimal places) to m and vice versa where 0 is used as a place holder, e.g. 72m = 0.072km Convert kg (up to 3 decimal places) to g and vice versa where 0 is used as a place holder, e.g. 604g = 0.604kg Convert l (up to 3 decimal places) to ml and vice versa where 0 is used as a place holder, e.g. 0.093l = 93ml se all four operations to solve Solve problems involving measures	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units (e.g. mm3 and km Use, read and write standard units of length, mass, volume and time using decimal notation to three decimal places Convert between standard units of length, mass, volume and time using decimal notation to three decimal places Convert between miles and kilometres Recognise that shapes with the same areas can have different perimeters and vice vers

SPRING 2					
		Year 3	Year 4	Year 5	Year 6
Week 1	Addition and Subtraction/ Calculations	Add 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 answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate Estimate; use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Add and subtract numbers mentally with increasingly large numbers and decimals to two decimal places • Add and subtract whole numbers with more than 4 digits and decimals with two decimal places, including using formal written methods (columnar addition and subtraction) • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers in the calculation • Recall and use addition and subtraction facts for 1 (with decimals to two decimal places) • Perform mental calculations including with mixed operations and large numbers and decimals • Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction) • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Use knowledge of the order of operations to carry out calculations • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving all four operations, including those with missing number
Week 2	Y3/4 Fractions Y5/6- Statistics	Recognise, find and write fractions of a discrete set of objects • Recognise and use fractions as numbers fractions with small denominators Recognise and show, using diagrams, equivalent fractions with small denominators • Count on and back in steps of 1 2 , 1 4 and 1 3 • Solve problems that involve all of the above	Recognise and show, using diagrams, families of common equivalent fractions • Recognise and write decimal equivalents of any number of tenths or hundredths • Recognise and write decimal equivalents to 1 4 , 1 2 , 3 4 Add and subtract fractions with the same denominator (using diagrams) • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	♣Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes). ♣Complete, read and interpret information in tables and timetables. ♣Solve comparison, sum and difference problems using information presented in all types of graph including a line graph. ♣Calculate and interpret the mode, median and range.	♣Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes). ♣Complete, read and interpret information in tables and timetables. ♣Solve comparison, sum and difference problems using information presented in all types of graph including a line graph. ♣Calculate and interpret the mode, median and range.

			• Solve simple measure and money problems involving fractions and decimals to two decimal places		
Week 3	**Geometry (Y3/4/5/6)**	Draw and sort 2-D shapes • Recognise angles as a property of shape or a description of a turn Identify right angles, recognise that two right angles make a halfturn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Identify lines of symmetry in 2-D shapes presented in different orientation s • Complete a simple symmetric figure with respect to a specific line of symmetry • Continue to identify horizontal and vertical lines and pairs of perpendicular and parallel lines • Identify acute and obtuse angles and compare and order angles up to two right angles by siz	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles • Use the properties of rectangles to deduce related facts and find missing lengths and angles • Identify 3-D shapes from 2-D representations • Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • Draw given angles, and measure them in degrees (°) • Identify: - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and half a turn (total 180°) - other multiples of 90°	Compare/classify geometric shapes based on the properties and sizes • Draw 2-D shapes using given dimensions and angles • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius • Recognise, describe and build simple 3-D shapes, including making nets • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles • Find unknown angles in any triangles, quadrilaterals, regular polygons
Week 4	**Position and Direction (Y3/4)** **Geometry (Y5/6)**	Describe positions on a square grid labelled with letters and numbers	Describe positions on a 2-D grid as coordinates in the first quadrant • Plot specified points and draw sides to complete a given polygon • Describe movements between positions as translations of a given unit to the left/right and up/down	Describe positions on the first quadrant of a coordinate grid • Plot specified points and complete shapes	• Describe positions on the full coordinate grid (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Week 5	**TIME**	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate/read time with increasing accuracy to the nearest minute • Record/compare time in terms of seconds, minutes, hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, midnight • Know the number of seconds in a minute and the number of days in each month, year and leap year	Read, write and convert time between analogue and digital 12- and 24-hour clocks.	Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks • Solve problems involving converting between units of time	Use, read and write standard units of and time using decimal notation to three decimal places

		• Compare durations of events [for example to calculate the time taken by particular events or ta			

SUMMER 1					
		Year 3	Year 4	Year 5	Year 6
Week 1	Place Value	• Identify the value of each digit to one decimal place • Partition numbers in different ways (e.g. 146 = 100+ 40+6 and 146 = 130+16) • Compare and order numbers up to 1000 • Compare and order numbers with one decimal place • Find 1, 10 or 100 more or less than a given number • Round numbers to at least 1000 to the nearest 10 or 100 • Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer • Describe and extend number sequences involving counting on or back in different steps	Order and compare numbers beyond 1000 • Order and compare numbers with the same number of decimal places up to two decimal places • Find 0.1, 1, 10, 100 or 1000 more or less than a given number • Round any number to the nearest 10, 100 or 1000 • Round decimals (one decimal place) to the nearest whole number	Read, write, order and compare numbers with up to 3 decimal places • Identify the value of each digit to three decimal places • Identify represent and estimate numbers using the number line • Find 0.01, 0.1, 1, 10, 100, 100 and other powers of 10 more or less than a given number • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	Count forwards or backwards in steps of integers, decimals, powers of 10 • Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit • Identify the value of each digit to three decimal places • Identify, represent and estimate numbers using the number line • Order and compare numbers including integers, decimals and negative numbers • Find 0.001, 0.01, 0.1, 1, 10 and powers of 10 more/less than a given number
Week 2	Y3/4 Addition and Subtraction Y5/6 Place Value	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation Understand and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context • Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds • Add 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 answers • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation • Add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place • Add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate • Estimate; use inverse operations to check answers to a calculation • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why • Solve addition and subtraction problems involving missing number	• Round decimals with two decimal places to the nearest whole number and to one decimal place • Multiply/divide whole numbers and decimals by 10, 100 and 1000 • Interpret negative numbers in context, count on and back with positive and negative whole numbers, including through zero • Describe and extend number sequences including those with multiplication/division steps and where the step size is a decimal Read Roman numerals to 1000 (M); recognise years written as such • Solve number and practical problems that involve all of the above	Round any whole number to a required degree of accuracy • Round decimals with three decimal places to the nearest whole number or one or two decimal places • Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • Use negative numbers in context, and calculate intervals across zero • Describe and extend number sequences including those with multiplication and division steps, inconsistent steps, alternating steps and those where the step size is a decimal • Solve number and practical problems that involve all of the above

Week 3	**Multiplication Y3/4 /5/6**	Recall and use multiplication facts for the 3, 4 and 8 multiplication tables • Derive and use doubles of all numbers to 100 • Derive and use doubles of all multiples of 50 to 500 • Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Solve problems, including missing number problems, involving multiplication including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	• Recall multiplication and division facts for multiplication tables up to 12 × 12 Multiply two-digit and three-digit numbers by a one-digit number using formal written layout • Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit,	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Use partitioning to double or halve any number, including decimals to two decimal places • Multiply numbers mentally drawing upon known facts • Solve problems involving multiplication including using their knowledge of factors and multiples, squares and cubes • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • Use estimation/inverse to check answers to calculations; determine, in the context of a problem, an appropriate degree of accuracy	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Use partitioning to double or halve any number, including decimals to two decimal places • Multiply numbers mentally drawing upon known facts • Solve problems involving multiplication including using their knowledge of factors and multiples, squares and cubes • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • Use estimation/inverse to check answers to calculations; determine, in the context of a problem, an appropriate degree of accuracy
Week 4	**Division Y3.4** **Y5- Addition and Subtraction**	Recall and use and division facts for the 3, 4 and 8 multiplication tables • Write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Solve problems, including missing number problems, involving division (and interpreting remainders), including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Recall division facts for multiplication tables up to 12 × 12 • Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Solve problems involving division (including interpreting remainders), integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) • Select a mental strategy appropriate for the numbers involved in the calculation Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Solve addition and subtraction problems involving missing numbers	SATS Revision Type 1 and 2 Practice
Week 5	**2D and 3D shape**	Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe		Distinguish between regular and irregular polygons based on	SATS Week

	Area Y4 2 lessons	them • Recognise angles as a property of shape or a description of a turn • Identify right angles, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Identify acute and obtuse angles and compare and order angles up to two right angles by size • Know area is a measure of surface within a given boundary • Find the area of rectilinear shapes by counting squares	reasoning about equal sides and angles • Use the properties of rectangles to deduce related facts and find missing lengths and angles • Identify 3-D shapes from 2-D representations • Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • Draw given angles, and measure them in degrees (°) • Identify: - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and half a turn (total 180°) - other multiples of 9	
Week 6	**Fractions Problem Solving**	• Add and subtract fractions with the same denominator within one whole [for example, 5 7 + 1 7 = 6 7] (Spring 2)	Problem solving Week	Problem Solving Week	Problem Solving

SUMMER 2					
		Year 3	Year 4	Year 5	Year 6
Week 1	Measure (money)	Continue to recognise and use the symbols for pounds (£) and pence (p) and understand that the decimal point separates pounds/pence • Recognise that ten 10p coins equal £1 and that each coin is 1 10 of £1 • Add and subtract amounts of money to give change, using both £ and p in practical contexts • Solve problems involving money and measures and simple problems involving passage of time	• Write amounts of money using decimal notation • Recognise that one hundred 1p coins equal £1 and that each coin is 1 100 of £1 • Solve problems involving money and measures	Use all four operations to solve problems involving measure using decimal notation, including scaling	Post SATS Project Maths
Week 2	Fractions	• Recognise and use fractions as numbers: Recognise that tenths arise from dividing objects into 10 equal parts and in dividing one-digit numbers or quantities by 10 • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators • Recognise and show, using diagrams, equivalent fractions with small denominators • Add and subtract fractions with the same denominator within one whole [for example, 5 7 + 1 7 = 6 7] • Compare and order unit fractions, and fractions with the same denominators (including on a number line) • Count on and back in steps of 1 2 , 1 4 and 1 3 • Solve problems that involve all of the above	• Recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators • Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten • Count on and back in steps of unit fractions • Compare and order unit fractions and fractions with the same denominators (including on a number line) • Recognise and show, using diagrams, families of common equivalent fractions • Recognise and write decimal equivalents of any number of tenths or hundredths • Recognise and write decimal equivalents to 1 4 , 1 2 , 3 4 • Add and subtract fractions with the same denominator (using diagrams) • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number • Solve simple measure and money problems involving fractions and decimals to two decimal places	Recognise mixed numbers and improper fractions and convert from one form to the other • • Count on and back in mixed number steps such as 11 2 • Compare and order fractions whose denominators are all multiples of the same number (including on a number line) • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Write statements > 1 as a mixed number (e.g. 2 5 + 4 5 = 6 5 =1 1 5) • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • Recognise 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 decimal • Solve problems involving fractions and decimals to three places • Solve problems which require knowing percentage and decimal equivalents of 1 2 , 1 4 , 1 5 , 2 5 , 4 5 and fractions with a denominator of a multiple of 10 or 25	Enterprise Week (Fiver Challenge)

Week 3	**Statistics**	Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects • Interpret and present data using bar charts, pictograms and tables • Solve 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	Use a variety of sorting diagrams to compare and classify numbers and geometric shapes based on their properties and sizes • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes) • Complete, read and interpret information in tables and timetables • Solve comparison, sum and difference problems using information presented in all types of graph including a line graph • Calculate and interpret the mode, median and range	Problem Solving
Week 4	**Place Value**	Round numbers to at least 1000 to the nearest 10 or 100 • Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer • Describe and extend number sequences involving counting on or back in different steps • Read Roman numerals from I to XII • Solve number problems and practical problems involving these idea	Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps • Read Roman numerals to 100 and know that over time, the numeral system changed to include the concept of zero and place value • Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Read, write, order and compare numbers with up to 3 decimal places Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • Round decimals with two decimal places to the nearest whole number and to one decimal place • Multiply/divide whole numbers and decimals by 10, 100 and 1000 • Interpret negative numbers in context, count on and back with positive and negative whole numbers, including through zero • Describe and extend number sequences including those with multiplication/division steps and where the step size is a decimal • Read Roman numerals to 1000 (M); recognise years written as such • Solve number and practical problems that involve all of the above	Problem Solving
Week 5					

		REVISITING WEEK