Mathematics Medium Term Overview: Year 5

T1 Week 1 Place value Terms – positional, multiplicative, additive, base10	**T1 Week 2** Place value with practical activities	**T1 Week 3** Fractions and decimal place up to 100ths	**T1 Week 4** Percentages	**T1 Week 5** percentages and linking to fractions and decimals	**T1 Week 6** Mental Calculation –	**T1 Week 7** Written methods for addition and subtraction,	**T1 Week 8** Written methods for addition and subtraction, including decimals
T2 Week 1 Mental calculation strategies,	**T2 Week 2** Continue with mental calculation	**T2 Week 3** Written methods with reasoning for multiplication and division as the inverse.	**T2 Week 4** Written methods with reasoning for division and multiplication as the inverse.	**T2 Week 5** Scaling up and scaling down.	**T2 Week 6** 3D shape: using manipulatives	**T2 Week 7** 2D shape: These two weeks could be as one. Make sure the highlighted red elements are completed	**T2 Week 8** 2D shape:
T3 Week 1 Place value as in term 1	**T3 Week 2** Negative numbers	**T3 Week 3** Fractions:	**T3 Week 4** Fractions:	**T3 Week 5** Mental calculation	**T3 Week 6** Mental calculation	**T3 Week 7** Written calculation methods	**T3 Week 8** Written calculation methods
T4 Week 1 Mental calculation strategies as in term 2 algebra	**T4 Week 2** Continue with mental calculation	**T4 Week 3** Written methods for multiplication and division	**T4 Week 4** Written methods Continuation	**T4 Week 5** Scaling up and scaling down as in term 2	**T4 Week 6** Interesting numbers:	**T4 Week 7** Drawing triangles and quadrilaterals	**T4 Week 8** Reflection and translational symmetry
T5 Week 1 Consolidate place value as in Term 1 and Term 3	**T5 Week 2** Roman Numeral investigations, numbers to 1000	**T5 Week 3** Consolidate addition and subtraction of fractions	**T5 Week 4** Consolidate fractions, percentages and decimals of quantities	**T5 Week 5** Consolidate mental calculation strategies	**T5 Week 6** Consolidate written methods	**T5 Week 7** Multi-step problems involving all four operations	**T5 Week 8** Assessment, reinforcement and rehearsal of areas learned over this term
T6 Week 1 Consolidate mental calculation strategies as Terms 2 and 4	**T6 Week 2** Consolidate written calculation as Term 4	**T6 Week 3** Long multiplication	**T6 Week 4** Long multiplication	**T6 Week 5** Consolidate scaling up and scaling down as Terms 2 and 4 linking to measurement	**T6 Week 6** Consolidation of 3D and 2D shape	**T6 Week 7** Consolidation of coordinates,	**T6 Week 8** Assessment, reinforcement and rehearsal of areas learned over this term

Mathematics Medium Term Overview: Year 5

Four main areas:

Reasoning and Mastery of Number: **Autumn 1; Spring 1 and Summer 1**
Reasoning and Mastery of Addition and Subtraction: **Autumn 1; Spring 1 and Summer 1**
Reasoning and Mastery of Multiplication and Division: **Autumn 2; Spring 2 and Summer 2**
Reasoning and Mastery of Geometry: **Autumn 2; Spring 2 and Summer 2**

Fractions, Statistics, Fractions, Measurement are all integrated within these four main blocks
These are highlighted in Red and are essential that they are taught in that week to ensure coverage. These elements will be monitored to ensure they happen in these weeks.

	Overall Weekly outcome
	Statutory Content to be taught during specific weeks week
	Possible Enrichment activities
Target Tracker Statements in red text for Terms 1-5. Term 6 focus use missing targets within each unit	

Mathematics Medium Term Overview: Year 5

Areas of focus
Prime numbers and composite numbers
Rounding to nearest 10 100 1000.
Multiplying and dividing by 10 100 and 1000
Solving measurement problems using all four operations

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Number **Place Value**		Reasoning and Mastery of Number **Fractions and Percentages**			Reasoning and Mastery of Addition and Subtraction		
Autumn 1	**Vocabulary:** **Multiplicative Additive fraction vinculum, denominator, numerator, equivalence** **fraction vinculum, denominator, numerator, equivalence** **Mental Arithmetic Focus** **Addition** Follow micro steps as a base guide from steps 17-19					**Vocabulary** **Augend for the number you have, addend for the numbers to be added, sum for the combined amounts:** **augend add addend equals sum** **Minuend for the amount you have, subtrahend for the amount subtracted and difference for the amount left:** **minuend subtract subtrahend equals difference** **Mental Arithmetic Focus** **Subtraction** Follow Micro steps 18-20		

Mathematics Medium Term Overview: Year 5

Autumn 1	Place value Terms – positional, multiplicative, additive, base10 To identify the Place Value of numbers up to 1 000 000 and hundredths: link back to year 4. showing positional, multiplicative, and additive, Grids & Digit cards Gettegno charts Links to prime and composite numbers (non Prime) Links to prime numbers within teaching Revisit: How many days in each month Rhyme	Place value with practical activities Ordering and comparing numbers up to 1.000,000 Greater than, less than, equals and including rounding to 10, 100 link back to year 4 and 1000, 10,000 and 100,000 Link to to measurement length, mass, capacity, volume. Links to prime and composite numbers (Non Prime)	Fractions and decimal place up to 100ths link to division and decimal place and place value. (10^{th}, 100^{th}), whole part relationships (animals) Problem solving throughout	Percentages Finding Percentages /100 and make explicit links with fraction decimal and percentage. Looking at how one corresponds to another Pie charts, examples & bar modelling, Problem solving throughout Rounding to the nearest 10 100 1000	percentages and linking to fractions and decimals Work based on problem solving with a context of Money Work within contexts of money	Mental Calculation – partitioning, doubling, halving, number pairs, multiples of 10 and adjusting, using known number facts, bridging through 10, counting on and counting back Time differences and durations Bar charts Perimeter and its formula Missing whole number problems linking to algebra	Written methods for addition and subtraction, Addition of whole number increasing in size subtraction to check and vice versa Bar charts,/ line graph finding totals and differences	Written methods for addition and subtraction, including decimals Addition and Subtraction of amounts including decimals Links to Measures of length, cm and mm, mass kg include imperial measurements Solving measurement problems using all 4 operations include and g, capacity, l and ml, practical activities and problem solving (sand)

Mathematics Medium Term Overview: Year 5

Target Tracker Statements	Number and Place Value I can read write, order and compare numbers up to at least 1,000,000 and say the value of each digit. I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back Multiplication and Division I can use vocabulary relating to prime numbers, prime factors and composite numbers I can work out if any given number up to 100 is a prime number, prime factors and composite numbers. Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head.	Number and Place Value I can read write, order and compare numbers up to at least 1,000,000 and say the value of each digit. I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back Multiplication and Division I can use vocabulary relating to prime numbers, prime factors and composite numbers I can work out if any given number up to 100 is a prime number, prime factors and composite numbers. Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. Measurement I can convert between different forms of metric measurement…	Fractions I can compare and order fractions whose denominators are all multiples of the same numbers I can find and name equivalent fractions of a given fraction including tenths and hundredths. Multiplication and Division I can mentally multiply and divide numbers using the times tables. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign.	Multiplication and Division I can multiply and divide whole and decimal numbers by 10, 100 and 1000 I can mentally multiply and divide numbers using the times tables I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. Fractions I can identify the percent symbol and how it relates to parts per hundred, hundredths and decimals I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can write equivalent fractions of a given fraction including tenths and hundredths Number and Place Value I can round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000	Multiplication and Division I can multiply and divide whole and decimal numbers by 10, 100 and 1000 I can mentally multiply and divide numbers using the times tables I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. Fractions I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can solve problems which require knowing percentage and decimal equivalents of ½ ¼ 1/5 … Measurement I can use all four operations to solve problems involving measure such as length, mass, volume money using decimal notation, including scaling.	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable. Number and Place Value I can solve numbers and practical problems that involve ordering and comparing numbers up to 1000,000 counting forwards or backwards in steps, negative numbers and rounding. Measurement I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Statistics I can solve comparison, sum and difference problems using information presented in a line graph	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can add and subtract numbers with more than 4 digits using written methods. Measurement I can understand and compare equivalences between metric units and common imperial units. These might include inches pounds or pints. I can use all four operations to solve problems involving measure such as length, mass, volume money using decimal notation, including scaling.

Mathematics Medium Term Overview: Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Multiplication and Division					Reasoning and Mastery of Geometry		
Autumn 2	**Vocabulary:** **Multiplicand for the number you have, multiplier for the amount of times you have it and product for the total:** **multiplicand multiplied by multiplier equals product** **Dividend for the amount you have, divisor for the number of groups you are taking away and quotient for how many groups you make: dividend divided by divisor equals quotient** **Mental Arithmetic Focus** **Multiplication.** Follow micro steps as a base guide from steps 13-15					**Vocabulary:** **Names of shapes; Symmetry reflectional symmetry, translational symmetry prism, angles, acute obtuse reflex straight angle, full rotation (perigon angle)** **Plane, viewpoint, orientation,** **Mental Arithmetic Focus** **Division** Follow micro steps as a base guide from steps 15-16		

Mathematics Medium Term Overview: Year 5

Term 2	Mental calculation strategies, Partitioning, doubling and doubling, halving and halving, x by 5 and 10 and halving, ÷ by 5 by ÷ 10 and doubling, x by 20 by x 10 and double, ÷20 by ÷ 10 and halving, x by 15, x by 10, halve and add, using known facts, grouping Bar model problems, e.g. Sam had 23 cars, Tom had 5 times as many. How many more did Tom have?	Continue with mental calculation Finding areas and solid volumes and exploring the formulae for these – practically on squared paper and using interlocking cubes. Link to cubed numbers and squared numbers Creating, e.g. time/distance line graphs where scale goes up in multiples the children need to practice Missing number problems linking to algebra	Written methods with reasoning for multiplication and division as the inverse. Make arrays using place value counters for 4 digit multiplication by single digit and link to grid method and then short written method. Link this to division using the array, for example, 1 365 x 3 = 4 095, so 4 095 ÷ 365 = 3 and link to 4 095 ÷ 3 = 365. Link to measures: 1l 245ml juice in a jug, how much in 6 jugs?	Written methods with reasoning for division and multiplication as the inverse. Use manipulatives for 4 digits by single digit. Checking using multiplication. Bar Modelling Word problems that have remainders the children need to decide what to do, e.g. 145 children going on trip, mini buses hold 9 children. How many mini buses needed? Scaling links to negative numbers	Scaling up and scaling down. Scaling Problems using division and multiplication Time conversion and miles to kilometres conversion through problem solving. Link this to ratio	3D shape: using manipulatives Identify 3d shapes from a 2D representations. Exploring 3d shape Using manipulatives to make sphere, cube, cuboid, pyramid and a variety of prisms, exploring what happens to get each new shape and properties Visualising net of pyramid, then cube and prisms and then making them. Exploring which patterns make nets and which don't. investigation: how many faces, edges and vertices and develop generalization Make link to area and volume	2D shape: These two weeks could be as one. Make sure the highlighted red elements are completed. Compare and classify more advanced shapes such as octagon, heptagon, and nonagon shapes according to properties such as symmetrical or angle related. Focus on different named quadrilaterals and triangles	2D shape and angles: drawing using given dimensions and angles, See below. You will need a lesson on how to use a protractor as this is the first time they will have used this. focusing on how to use a protractor. Exploring missing angles and lengths in rectangles and using formula, e.g. a = 360 – (b + c) Angles in a turn, (90°,180°, 270°,360 °) and distance between 2 sides in a shape

Mathematics Medium Term Overview: Year 5

Target Tracker Statements	Multiplication and Division I can mentally multiply and divide numbers using the times tables. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign.	Multiplication and Division I can mentally multiply and divide numbers using the times tables. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can identify and use cube numbers and their notation I can identify and use cube numbers and their notation Statistics I can solve comparison, sum and difference problems using information presented in a line graph I can complete, read and interpret information in tables including timetables.	Multiplication and Division I can mentally multiply and divide numbers using the times tables. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates,	Multiplication and Division I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders I can use negative numbers in context when looking at temperature or money counting forwards and backwards through 0	Multiplication and Division I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates, Measurement I can solve problems where I need to convert between units of time I can convert between different forms of metric measurement…	Properties of shape I can identify 3d shapes including cubes and other cuboids from 2 di representations Measurement I can calculate and compare the area of rectangles including squares and including using standard units, squared centimetres squared metres and estimate the area of irregular shapes. I can estimate volume by using 1cm3 blocks to build cuboids….	Properties of shape I can estimate and compare acute, obtuse and reflex angles… I can identify angles at a point and one whole turn I can identify angles at a point on a straight line and ½ a turn total 180 degrees I can tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles.	Properties of shape I can estimate and compare acute, obtuse and reflex angles… I can identify angles at a point and one whole turn I can identify angles at a point on a straight line and ½ a turn total 180 degrees I can tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles. I can use the properties of rectangles to find related facts, missing lengths and missing angles I can draw given angles and measure them in degrees I can identify other multiples of 90 degrees Position and direction I can identify and represent the position of a shape…

Mathematics Medium Term Overview: Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Number **Place Value**		Reasoning and Mastery of Number **Fractions**		Reasoning and Mastery of Addition and Subtraction			
Spring 1	**Vocabulary:** **Multiplicative Additive fraction vinculum, denominator, numerator, equivalence** **fraction vinculum, denominator, numerator, equivalence** **Mental Arithmetic Focus** **Addition** Follow micro steps as a base guide from steps 19-21				**Vocabulary:** **Augend for the number you have, addend for the numbers to be added, sum for the combined amounts:** **augend add addend equals sum** **Minuend for the amount you have, subtrahend for the amount subtracted and difference for the amount left:** **minuend subtract subtrahend equals difference** **Mental Arithmetic Focus** **Subtraction** Follow Micro steps 20-23			

Mathematics Medium Term Overview: Year 5

Spring 1	Place value as in term 1 (Algebra) To use place value to satisfy pairs of numbers in an equation with two unknowns, e.g. a + b = 10,500 a has a greater amount in the thousands column than b a – 8050 = b b must be greater than 8050 Solving missing number problems and linking to algebra Links to bar modelling Count backwards and forwards to the power of 10 from any given number Rounding to 10 100 1000, 10,000, 100,000 recap	Negative numbers Solving problems involving negative numbers over numbers -100 Link to measurement within the context of temperature on different scales Roman numeral investigation to 500 Count backwards and forwards with positive and negative whole numbers	Fractions: addition and subtraction, finding equivalences to do this, counting in fractional steps, improper fractions and mixed numbers – link to addition and counting, e.g. ½, 1, 1 ½, 2, 2 ½, How many halves? Bar modelling throughout week and manipulatives	Fractions/ Decimals: Making links between decimals and percentages Link to Money and percentages off items based on their original price Problem solving using bar model	Mental calculation strategies as in Term 1, picking up on any that weren't covered, linking to time differences and durations, Perimeter of regular (with formula) and irregular shapes including compound shapes	Continue with mental calculation Problem solving supported by bar modelling strategies Where they are using reasoning and organistation to support the bar model. Problem solving could include Money and measure Measure problems involving all 4 operations picking up on what wasn't covered in previous week	Written calculation methods Addition and subtraction, calculation methods following from micro steps linking to money multi- step problems Bar/line charts and time tables	Continue with written Focusing on gaps in understanding recapping week 1 and 3 calculation methods within different contexts

Mathematics Medium Term Overview: Year 5

Target Tracker Statements	Number and Place Value I can read write, order and compare numbers up to at least 1,000,000 and say the value of each digit. I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back I can round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000	Number and Place Value I can read write, order and compare numbers up to at least 1,000,000 and say the value of each digit. I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back I can round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000 I can solve numbers and practical problems that involve ordering and comparing numbers up to 1000,000 coun ting forwards or backwards in steps, negative numbers and rounding. I can read Roman numerals p to 1000 and regognise years written in them Measurement I can convert between different forms of metric measurement…	Fractions I can identify the percent symbol and how it relates to parts per hundred, hundredths and decimals I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can write equivalent fractions of a given fraction including tenths and hundredths I can add and subtract fractions whose denominators are all multiples of the same number I can multiply fractions by whole numbers using objects and pictures I can identify missed numbers and improper fractions and convert one to another.	Fractions I can identify the percent symbol and how it relates to parts per hundred, hundredths and decimals I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can write equivalent fractions of a given fraction including tenths and hundredths I can identify and use thousandths and can explain how they relate to tenths and hundredths and their decimal equivalents. I can round numbers with two decimal places. I can read and write order and compare numbers with up to three decimal places I can solve problems involving numbers with up to three decimal places I can solve problems which require knowing percentage and decimal equivalents of ½ ¼ 1/5 …	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable. Measurement I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres I can solve problems where I need to convert between units of time I can convert between different forms of metric measurement	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Measurement I can convert between different forms of metric measurement… I can use all four operations to solve problems involving measure such as length, mass, volume, **money** using decimal notation, including scaling	Addition and Subtraction I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Multiplication and Division I can solve problems involving addition and subtraction, multiplication and division and a combination of these including the understanding of the = sign Statistics I can complete read and interpret information in tables I can solve comparison, sum and difference problems using information presented in a line graph	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Multiplication and Division I can solve problems involving addition and subtraction, multiplication and division and a combination of these including the understanding of the = sign Statistics I can complete read and interpret information in tables I can solve comparison, sum and difference problems using information presented in a line graph

Mathematics Medium Term Overview: Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Multiplication and Division						Reasoning and Mastery of Geometry	
Spring 2	**Vocabulary:** **Multiplicand for the number you have, multiplier for the amount of times you have it and product for the total: multiplicand multiplied by multiplier equals product** **Dividend for the amount you have, divisor for the number of groups you are taking away and quotient for how many groups you make: dividend divided by divisor equals quotient** **Mental Arithmetic Focus Multiplication** Follow micro steps as a base guide from steps 16						**Vocabulary:** **Names of shapes; Symmetry reflectional symmetry, translational symmetry prism, angles, acute obtuse reflex straight angle, full rotation (perigon angle) Plane, viewpoint, orientation,** **Mental Arithmetic Focus Division** Follow micro steps as a base guide from steps 17-18	

Mathematics Medium Term Overview: Year 5

Spring 2	**Mental calculation** strategies as in term 2 algebra finding pairs of numbers that satisfy an equation with two unknowns, e.g. a x 12 = b, a x b = 48 Look at factor pairs Areas of shapes	Continue with **Mental calculation**, picking up on strategies not covered in previous week. Mental calculations and algebra involving missing number problems Bar model problems	Written methods for multiplication and division Written methods for multiplication and division using micro steps for 4 digit numbers and 1 decimal place Link to statistics: line graphs, bar graphs	Written methods Continuation Written methods for multiplication and division for 4 digit numbers and 2 decimal places bar modelling fractions and money	Scaling up and scaling down as in term 2 Scaling up and down using multiplication and division leading on from term 2 Link to Capacity Links to scaling of objects and shape such as the reproducing of a trangle with a altered scale.	Interesting numbers: To find patterns in number. Primes and composite numbers squares linking to area, cubes Linking to volume Common factors and multiples Prime factors Factor and multiple investigations.	Drawing triangles and quadrilaterals Drawing triangles to given dimensions and angles knowing that the total angles = 180 and angles that related to triangles where two angles are the same or all angles are the same. **Do not go onto missing angles at this point.** Finding missing angles linking to algebra	Reflection and translational symmetry Reflection and translation in the first quadrant Reelection will have been taught before but translation not. Main focus is that translation is a different type of symmetry. Link to coordinates and negative numbers

Mathematics Medium Term Overview: Year 5

Target Tracker Statements								
	Multiplication and Division I can mentally multiply and divide numbers using the times tables. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates, Measurement I can calculate and compare the area of rectangles including squares and including using standard units.	Multiplication and Division I can use vocabulary relating to prime numbers, prime factors and composite numbers I can find multiples and factors of a number and can identify factors common to 2 different numbers I can multiply and divide whole and decimal numbers by 10 100 and 1000 I can mentally multiply and divide numbers using the times tables. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign.	Multiplication and Division I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving addition subtraction multiplication and division and a combination of these including understanding the meaning of the = sign. I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders I can identify and use cube numbers and their notation I can identify and use cube numbers and their notation	Multiplication and Division I can multiply fractions by whole numbers using objects and pictures. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates, Measurement I can use all four operations to solve problems involving measure such as length, mass, volume, **money** using decimal notation, including scaling	Multiplication and Division I can divide numbers with up to 4 digits by a 1 digit number using formal written methods and can show remainders. I can multiply numbers up to 4 digits by a 1 or 2 digit number using formal written methods. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates, Measurement I can convert between different forms of metric measurement I can use all four operations to solve problems involving measure such as length, mass, volume money using decimal notation, including scaling.	Multiplication and Division I can use vocabulary relating to prime numbers, prime factors and composite numbers I can work out if any given number up to 100 is a prime number, prime factors and composite numbers. I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates I can mentally multiply and divide numbers using the times tables.	Properties of shape I can estimate and compare acute, obtuse and reflex angles… I can identify angles at a point and one whole turn I can identify angles at a point on a straight line and ½ a turn total 180 degrees I can tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles. I can use the properties of rectangles to find related facts, missing lengths and missing angles I can draw given angles and measure them in degrees I can identify other multiples of 90 degrees Position and direction I can identify and represent the position of a shape…	Properties of shape I can identify, describe and represent the position of a shape following a reflection or translation. I can use mathematical vocabulary to explain this and I know that the shape has not changed.

Mathematics Medium Term Overview: Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Number **Place Value**		Reasoning and Mastery of Number **Fractions and Percentages**		Reasoning and Mastery of Addition and Subtraction			
Summer 1	**Multiplicative Additive fraction vinculum, denominator, numerator, equivalence** **fraction vinculum, denominator, numerator, equivalence** **Mental Arithmetic Focus Addition** Follow micro steps as a base guide from steps 20-23				**Vocabulary:** **Augend for the number you have, addend for the numbers to be added, sum for the combined amounts:** **augend add addend equals sum** **Minuend for the amount you have, subtrahend for the amount subtracted and difference for the amount left:** **minuend subtract subtrahend equals difference** **Mental Arithmetic Focus Subtraction** Follow Micro steps 24-27			

Mathematics Medium Term Overview: Year 5

Summer 1	Roman Numeral investigations, numbers to 1000 Investigations project with problems linked to Roman numerals up to 1000. (M) Consolidate negative numbers Roman numeral problem maze created by children. Unlocking the code.	Consolidate place value as in Term 1 and Term 3 enrichment project: activities for Place value to 1,000,000 using skills taught from Year 5 in a variety of contexts. round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 Link to measurement- practical activities with mass capacity & vice versa Ordering and comparing, Greater than, less than, equals Looking to year 6 objectives. Order and comparison enrichment activities	Consolidate addition and subtraction of fractions Multiply proper fractions and mixed numbers by whole numbers Fractions and mixed number fractions Create fraction problems with equivalent decimal problems to show the link between,	Consolidate fractions, percentages and decimals of quantities Equivalences between fractions, decimals and percentages Bar model problems To work out percentages based on data given. Create a story based on findings.	Consolidate mental calculation strategies Consolidated written methods of addition into column addition where 0 is a place holder following micro steps within problem solving, measures and statistics Number problems to check correct and sensible use of key methods.	Consolidate written methods Consolidated written methods of subtraction into column addition where one or more 0s as place holder following micro steps Link to problem solving, measures and statistics Number problems to check correct and sensible use of key methods.	Multi-step problems involving all four operations Algebra and problem solving. Use of bar model and written methods. Number problems to check correct and sensible use of key methods.	Assessment, reinforcement and rehearsal of areas learned over this term Recap over any misconceptions so far this term.

Mathematics Medium Term Overview: Year 5

Target Tracker Statements	Number and Place Value I can read write, order and compare numbers up to at least 1,000,000 and say the value of each digit. I can keep multiplying a number by 10 or 100 up to 1,000,000 and count back I can round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000 Measurement I can convert between different forms of metric measurement I can use all four operations to solve problems involving measure such as length, mass, volume money using decimal notation, including scaling.	Number and Place Value I can read Roman numerals p to 1000 and regognise years written in them I can solve numbers and practical problems that involve ordering and comparing numbers up to 1000,000 counting forwards or backwards in steps, negative numbers and rounding.	Fractions I can identify the percent symbol and how it relates to parts per hundred, hundredths and decimals I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can write equivalent fractions of a given fraction including tenths and hundredths I can add and subtract fractions whose denominators are all multiples of the same number I can multiply fractions by whole numbers using objects and pictures I can identify missed numbers and improper fractions and convert one to another.	Fractions I can identify the percent symbol and how it relates to parts per hundred, hundredths and decimals I can read and write decimal numbers as fractions such as 0.71 = 71/100 I can write equivalent fractions of a given fraction including tenths and hundredths I can identify and use thousandths and can explain how they relate to tenths and hundredths and their decimal equivalents. I can round numbers with two decimal places. I can read and write order and compare numbers with up to three decimal places I can solve problems involving numbers with up to three decimal places I can solve problems which require knowing percentage and decimal equivalents of ½ ¼ 1/5 …	Addition and Subtraction I can add and subtract 2 and 3 digit numbers in my head. I can use rounding to check answers to calculations and determine levels of accuracy. I can add and subtract numbers with more than 4 digits using written methods. Measurement I can use all four operations to solve problems involving measure such as length, mass, volume, **money** using decimal notation, including scaling Statistics I can solve comparison, sum and difference problems using information presented on a line graph	Addition and Subtraction I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Multiplication and Division I can solve problems involving addition and subtraction, multiplication and division and a combination of these including the understanding of the = sign Measurement I can use all four operations to solve problems involving measure such as length, mass, volume, **money** using decimal notation, including scaling	Addition and Subtraction I can solve addition and subtraction problems needing more than one step and can work out which operation and method is most suitable I can add and subtract numbers with more than 4 digits using written methods. Multiplication I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates	

Mathematics Medium Term Overview: Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Reasoning and Mastery of Multiplication and Division					Reasoning and Mastery of Geometry		
Summer 2	**Vocabulary:** **Multiplicand for the number you have, multiplier for the amount of times you have it and product for the total:** **multiplicand multiplied by multiplier equals product** **Dividend for the amount you have, divisor for the number of groups you are taking away and quotient for how many groups you make: dividend divided by divisor equals quotient** **Mental Arithmetic Focus** **Multiplication** Follow micro steps as a base guide from steps 17-18					**Vocabulary:** **Names of shapes; Symmetry reflectional symmetry, translational symmetry prism, angles, acute obtuse reflex straight angle, full rotation (perigon angle)** **Plane, viewpoint, orientation,** **Mental Arithmetic Focus** **Division** Follow micro steps as a base guide from steps 18-20		

Mathematics Medium Term Overview: Year 5

Summer 2	Consolidate mental calculation strategies as Terms 2 and 4 Practise mental calculations with increasingly large numbers to aid fluency (for example, 12,462 – 2,300 = 10,162). Bar modelling Manipulatives Word problems Making own problems based on different operations	Consolidate written calculation as Term 4 Pupils use multiplication and division as inverses to support the introduction of ratio in year 6, Link to distributive law Distributivity can be expressed as a(b + c) = ab + ac children to recognise how multiplication is represented as an equation Look to ratio basics relate to year 6	Long multiplication multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, working towards long multiplication for two-digit numbers	Long multiplication multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, long multiplication for two-digit numbers Link to measurement Using examples where student chooses most appropriate methods	Consolidate scaling up and scaling down as Terms 2 and 4 linking to measurement multiplying and dividing by powers of 10 in scale drawings or by multiplying and dividing by powers of a 1,000 in converting between units link to measurement such as kilometres and metres solve addition and subtraction multi-step problems in contexts, deciding which operations and	Consolidation of 3D and 2D shape problem solving and measuring angles and finding missing angles linking from last term with a focus on triangles and rectangles. . Link to measurement and missing angles using known elements Problem related to missing angles of a more challenging level	Consolidation of coordinates, Using coordinates to show reflections and translations and angles as turns link to art. Art relating to translation and reflections using quadrants	Assessment, reinforcement and rehearsal of areas learned over this term