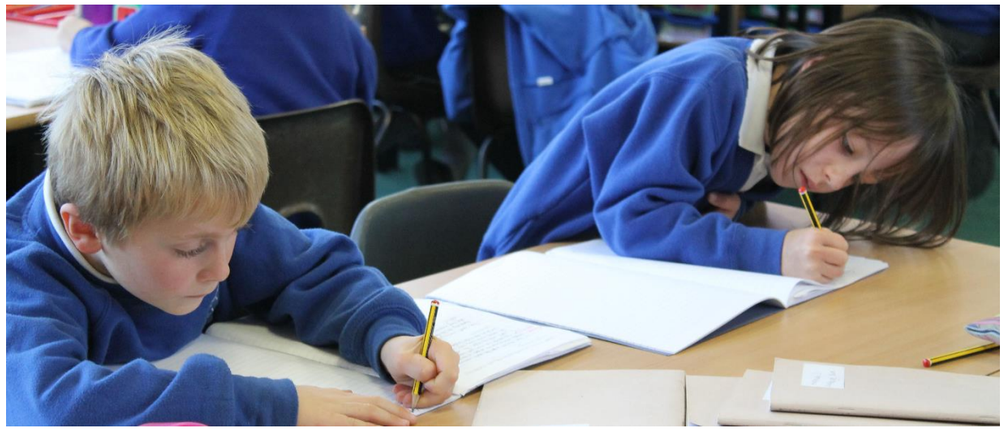
LIGHTHOUSE
SCHOOLS PARTNERSHIP

LSP Maths Plans

2020-2021



Maths Intent

In partnership with MathsHUBS Boolean

Mathematical Growth Mindset

All adults and pupils

Confidence

Purpose

Enjoyment

We believe that all children, pupils and young people can be successful mathematicians. We will support them to achieve this by providing an ambitious and carefully constructed mastery curriculum in mathmatics for all pupils. Through the explicit teaching pupils gain a deep understanding of key concepts and build upon these in order to make sustained progress. We provide opportunities to understand as well as experience the creativity and connectivity of maths to other areas of life. We want our pupils to become high quality mathematicians who are fluent in the fundamentals of maths, who can reason mathematically and solve problems both in maths and across the curriculum. Pupil's will leave our schools ready for the next stage in their life and for the challenges ahead.

Subject Expertise of all Staff

Representations and Structures

Small steps in learning

High quality CPD

Misconceptions

Thinking/reasoning

Age related expectations

Collaborative Working

Arithmetic Proficiency

Fluency

Variation

Mathematical thinking

Representations and Structures

Coherence

Systems

Teach up, keep up

Mathematics daily

timetable

Flexible lesson structure

Medium term plans

Role of support staff

LSP Maths Plans

2020-2021

Mixed Age Medium Term Plans

Maths Medium Term Plan Year 1 and *Year 2*

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and Place Value – Year 1 to 20 Year 2 to 100** ♣count to and across 20 forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 20 in numerals and words ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least *♣count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward* *♣ recognise the place value of each digit in a two-digit number (tens, ones)* *♣ identify, represent and estimate numbers using different representations, including the number line* *♣ compare and order numbers from 0 up to 100; use <, > and = signs* *♣ read and write numbers to at least 100 in numerals and in words* *♣ use place value and number facts to solve problems.* *Year 1: read and write numbers to at least 100 in numerals and words*			**Addition and subtraction – Year 1 to 20 (inc money) Year 2 within 100 (inc money)** ♣read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs ♣represent and use number bonds and related subtraction facts within 20 ♣add and subtract one-digit and two-digit numbers to 20, including 0 ♣solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9 ♣recognise and know the value of different denominations of coins and notes *♣solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures* *♣ applying their increasing knowledge of mental and written methods* *♣ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100* *♣ add and subtract numbers using concrete objects, pictorial representations, and mentally, including:* • *a two-digit number and ones* • *a two-digit number and tens* • *two two-digit numbers* • *adding three one-digit numbers* *♣ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot* *♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.* *♣recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value* *♣ find different combinations of coins that equal the same amounts of money* *♣ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change*			**Number: and– Year 1 Place Value to 50 and multiplication Year 2: Multiplication** ♣count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 50 in numerals and words**;** ♣count in multiples of 2s, 5s and 10s ♣ recognise and know the value of different denominations of coins and notes ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least ♣solve one step problems involving multiplication and division, by calculation the answer using concrete objects, pictorial representations and arrays with the support of the teacher *♣count in steps of 2, 3, 5 and 3 from 0, and in tens from any number, forward and backward* *♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs* *♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot* *♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.* *♣Recall and use multiplication and division facts for 2,5,and 10 times tables, including recognising odd and even numbers*		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	Number: Year 1 Division and Consolidation Year 2: Division ♣Count in multiples of 2,5 and 10 ♣solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher = ? – 9 *♣recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers* *♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs* *♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot* *♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.*		Year 1 Place Value to 100 ♣count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least Year 2 Statistics *♣interpret and construct simple pictograms, tally charts, block diagrams and simple tables* *♣ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity* *♣ ask and answer questions about totalling and comparing categorical data.*		Measurement – Length and Height ♣Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ♣measure and begin to record the following: Length and height *♣choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); using rulers, scales,* *♣compare and order lengths and record the results using >, < and =*	Shape ♣recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] ♣recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] *♣identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line* *♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces* *♣ identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]* *♣ compare and sort common 2-D and 3-D shapes and everyday objects*			Number: Year 1 Fractions and Consolidation Year 2: Fractions ♣recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity ♣recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity ♣Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ♣Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] *♣ recognise, find, name and write fractions ½, 1/3, 2/4, and ¾ of a length, shape, set of objects or quantity* *♣ write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½ .*		Consolidation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Position and direction ♣describe position, direction and movement, including whole, half, quarter and three-quarter turns ♣ *order and arrange combinations of mathematical objects in patterns and sequences* ♣ *use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).*	Time ♣Measure and begin to record time [for example, quicker, slower, earlier, later] time (hours, minutes, seconds) ♣sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] ♣recognise and use language relating to dates, including days of the week, weeks, months and years ♣tell the time to the hour and half past the hour and draw the hands on a clock face to show these times ♣ *compare and sequence intervals of time* ♣ *tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times* ♣ *know the number of minutes in an hour and the number of hours in a day*		Year 1: Place Value recap Year 2: Problem Solving Year one: consolidate their learning on place value *Year two: teacher assessment gaps in understanding*		Measurement ♣Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] ♣capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ♣measure and begin to record the following: mass/weight capacity and volume **Year 2: Measurement: Mass. Capacity and temperature** ♣*Choose and use appropriate standard units to estimate and measure (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using thermometers and measuring vessels* ♣ *compare and order, mass, volume/capacity and record the results using >, < and =*			Year 1: Four Operations recap *Year 2: Consolidation and Investigations*			

Maths Year 1 and 2: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL

Maths Medium Term Plan *Year 2* and Year 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and Place Value –Year 2 to 100 Year 3 to 1,000** *♣count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward* *♣ recognise the place value of each digit in a two-digit number (tens, ones)* *♣ identify, represent and estimate numbers using different representations, including the number line* *♣ compare and order numbers from 0 up to 100; use <, > and = signs* *♣ read and write numbers to at least 100 in numerals and in words* *♣ use place value and number facts to solve problems.* *Year 1: read and write numbers to at least 100 in numerals and words* ♣count from 0 in multiples of 4, 8, 50 and 100; ♣ find 10 or 100 more or less than a given number ♣ recognise the place value of each digit in a three-digit number (hundreds, tens, ones) ♣ compare and order numbers up to 1000 ♣ identify, represent and estimate numbers using different representations ♣ read and write numbers up to 1000 in numerals and in words ♣ solve number problems and practical problems involving these ideas			**Addition and subtraction – Year 2 within 100 (inc money) Year 3 within 1000 (inc money)** *♣solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures* *♣ applying their increasing knowledge of mental and written methods* *♣ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100* *♣ add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers* *♣ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot* *♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.* *♣recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value* *♣ find different combinations of coins that equal the same amounts of money* *♣ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change* ♣add and subtract amounts of money to give change, using both £ and p in practical contexts ♣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.			**Multiplication** *♣count in steps of 2, 3, 5 and 3 from 0, and in tens from any number, forward and backward* *♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs* *♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot* *♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.* *♣Recall and use multiplication and division facts for 2,5,and 10 times tables, including recognising odd and even numbers* ♣count from 0 in multiples of 4, 8 ♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ♣ 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 division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	Division ♣*recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers* ♣ *calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs* ♣ *show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot* ♣ *solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.* ♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ♣ 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 division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.		Statistics ♣*interpret and construct simple pictograms, tally charts, block diagrams and simple tables* ♣ *ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity* ♣ *ask and answer questions about totalling and comparing categorical data.* ♣ 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.		Measurement – Length and Height ♣*choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); using rulers, scales,* ♣*compare and order lengths and record the results using >, < and* ♣measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g), volume and capacity (l/ml) ♣ measure the perimeter of simple 2-D shapes	Geometry: Year 2: Shape, Position and Direction Year 3: Shape and Perimeter ♣*identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line* ♣ *identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces* ♣ *identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]* ♣ *compare and sort common 2-D and 3-D shapes and everyday objects* ♣ *order and arrange combinations of mathematical objects in patterns and sequences* ♣ *use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).* ♣draw 2-D shapes and make 3-D shapes using modelling materials; ♣recognise 3-D shapes in different orientations and describe 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 ♣measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g), volume and capacity (l/ml) ♣ measure the perimeter of simple 2-D shapes			Number: Year 2 Fractions and Consolidation Year 3: Fractions ♣ *recognise, find, name and write fractions ½, 1/3, 2/4, and ¾ of a length, shape, set of objects or quantity* ♣ *write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½ .* ♣count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 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 ♣ solve problems that involve all of the above.			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Measurement: Time ♣ *compare and sequence intervals of time* ♣ *tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times* ♣ *know the number of minutes in an hour and the number of hours in a day* ♣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 and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight ♣ know the number of seconds in a minute and the number of days in each month, year and leap year ♣ compare durations of events [for example to calculate the time taken by particular events or tasks].		Problem solving and efficient methods ***Year 2*** *Use assessment to address gaps in learning and possibly statutory assessments* Year 3 Recap on the four operations Use assessment knowledge to address gaps in learning			Measurement Year 2: Mass, Capacity and temperature Year 3: Mass and Capacity ♣*Choose and use appropriate standard units to estimate and measure (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using thermometers and measuring vessels* ♣ *compare and order, mass, volume/capacity and record the results using >, < and =* ♣measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml)			Consolidation and Investigations *Use assessment to consolidate any areas which require development*. Year 3 Recap Fractions and SSM. ♣Use data to identify any areas which require further development			

Maths Year 2 and 3: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL

Maths Medium Term Plan Year 3 and *Year 4*

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and Place Value –Year 2 to 100 Year 3 to 1,000** ♣count from 0 in multiples of 4, 8, 50 and 100; ♣ find 10 or 100 more or less than a given number ♣ recognise the place value of each digit in a three-digit number (hundreds, tens, ones) ♣ compare and order numbers up to 1000 ♣ identify, represent and estimate numbers using different representations ♣ read and write numbers up to 1000 in numerals and in words ♣ solve number problems and practical problems involving these ideas *♣count in multiples of 6, 7, 9, 25 and 1000* *♣ find 1000 more or less than a given number* *♣ count backwards through zero to include negative numbers* *♣ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)* *♣ order and compare numbers beyond 1000* *♣ identify, represent and estimate numbers using different representations* *♣ round any number to the nearest 10, 100 or 1000* *♣ solve number and practical problems that involve all of the above and with increasingly large positive numbers* *♣ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.*			**Number: Addition and subtraction)** ♣add and subtract amounts of money to give change, using both £ and p in practical contexts ♣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. *♣add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate* *♣ estimate and 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*				**Number: Multiplication and division** ♣count from 0 in multiples of 4, 8 ♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ♣ 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 division, 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* *♣ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.* *♣count in multiples of 6, 7, 9, 25 and 1000* *♣ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers* *♣ recognise and use factor pairs and commutativity in mental calculations*			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	**Number: Multiplication and division** ♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ♣ 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 division, 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* *♣ 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* *♣ recognise and use factor pairs and commutativity in mental calculations* *♣ 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, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.*		Length: Perimeter and area ♣measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g), volume and capacity (l/ml) ♣ measure the perimeter of simple 2-D shapes *♣Convert between different units of measure [for example, kilometre to metre; hour to minute]* *♣ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres* *♣ find the area of rectilinear shapes by counting squares*		Year 3: Fractions ♣count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 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 ♣ solve problems that involve all of the above. *♣recognise and show, using diagrams, families of common equivalent fractions* *♣ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.* *♣ 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* *♣ add and subtract fractions with the same denominator*			Y3: Measurement: Mass and Capacity ♣measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml) Y4: Number: Decimals *♣recognise and write decimal equivalents of any number of tenths or hundredths* *♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* *♣ solve simple measure and money problems involving fractions and decimals to two decimal places.* *♣Convert between different units of measure e.g. metres to kilometres.*		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Number: Decimals (including money) ♣add and subtract amounts of money to give change, using both £ and p in practical contexts *♣compare numbers with the same number of decimal places up to two decimal places* *♣round decimals with one decimal place to the nearest whole number* *♣ recognise and write decimal equivalents to ¼, ½, ¾* *♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* *♣ estimate, compare and calculate different measures, including money in pounds and pence* *♣ solve simple measure and money problems involving fractions and decimals to two decimal places*.		Measurement: 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 and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight ♣ know the number of seconds in a minute and the number of days in each month, year and leap year ♣ compare durations of events [for example to calculate the time taken by particular events or tasks]. *♣ 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.*			Statistics ♣ 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. *♣ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.* *♣ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs*			Geometry: Properties of shape (including in Y4 position and direction) ♣draw 2-D shapes and make 3-D shapes using modelling materials; ♣recognise 3-D shapes in different orientations and describe 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 *♣compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes* *♣ identify acute and obtuse angles and compare and order angles up to two right angles by size* *♣ identify lines of symmetry in 2-D shapes presented in different orientations* *♣ complete a simple symmetric figure with respect to a specific line of symmetry* *♣describe positions on a 2-D grid as coordinates in the first quadrant* *♣ describe movements between positions as translations of a given unit to the left/right and up/down* *♣ plot specified points and draw sides to complete a given polygon.* *(not found in WRM)*			

Maths Year 3 and 4: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL

Maths Medium Term Plan *Year 4* and Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and Place Value –Year 2 to 100 Year 3 to 1,000** *♣count in multiples of 6, 7, 9, 25 and 1000* *♣ find 1000 more or less than a given number* *♣ count backwards through zero to include negative numbers* *♣ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)* *♣ order and compare numbers beyond 1000* *♣ identify, represent and estimate numbers using different representations* *♣ round any number to the nearest 10, 100 or 1000* *♣ solve number and practical problems that involve all of the above and with increasingly large positive numbers* *♣ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.* ♣ read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit ♣ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ♣ interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero ♣ round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ♣ solve number problems and practical problems that involve all of the above ♣ read Roman numerals to 1000 (M) and recognise years written in Roman numerals.				**Number: Addition and subtraction** *♣add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate* *♣ estimate and 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 whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) ♣ add and subtract numbers mentally with increasingly large numbers ♣ 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.			**Number: Multiplication and division** *♣recall multiplication and division facts for multiplication tables up to 12 × 12* *♣ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.* *♣count in multiples of 6, 7, 9, 25 and 1000* *♣ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers* *♣ recognise and use factor pairs and commutativity in mental calculations* *♣ recognise and use factor pairs and commutativity in mental calculations* *♣ multiply two-digit and three-digit numbers by a one-digit number using formal written layout* ♣ multiply and divide numbers mentally drawing upon known facts ♣multiply by 10,100 and 1000 ♣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 (nonprime) numbers ♣ establish whether a number up to 100 is prime and recall prime numbers up to 19 ♣ recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}) ♣ solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Measurement: Perimeter and area *♣Convert between different units of measure [for example, kilometre to metre; hour to minute]* *♣ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres* *♣ find the area of rectilinear shapes by counting squares* ♣ measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ♣ calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes.	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	**Number: Multiplication and division** *♣recall multiplication and division facts for multiplication tables up to 12 × 12* *♣ 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* *♣ recognise and use factor pairs and commutativity in mental calculations* *♣ 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, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.* ♣ 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 ♣ multiply and divide numbers mentally drawing upon known facts ♣ 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 ♣ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign		Number: Fractions *♣recognise and show, using diagrams, families of common equivalent fractions* *♣ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.* *♣ 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* *♣ add and subtract fractions with the same denominator* ♣compare and order fractions whose denominators are all multiples of the same number ♣ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ♣ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5] ♣ add and subtract fractions with the same denominator and denominators that are multiples of the same number ♣ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams ♣ read and write decimal numbers as fractions [for example, 0.71 = 71/100] ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.					Number: Decimals *♣recognise and write decimal equivalents of any number of tenths or hundredths* *♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* *♣ solve simple measure and money problems involving fractions and decimals to two decimal places.* *♣Convert between different units of measure e.g. metres to kilometres.* *♣compare numbers with the same number of decimal places up to two decimal places* *♣round decimals with one decimal place to the nearest whole number* *♣ recognise and write decimal equivalents to ¼, ½, ¾* *♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* ♣ read, write, order and compare numbers with up to three decimal places ♣ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ♣ round decimals with two decimal places to the nearest whole number and to one decimal place ♣ solve problems involving number up to three decimal places ♣ 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 which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25. ♣Recognise and write decimal equivalents of any number of tenths or hundredths ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths ♣Solve simple measure and money problems involving fractions and decimals to two decimal places ♣convert between different units of measure (for example km to m)		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Number: Decimals (including money) *♣compare numbers with the same number of decimal places up to two decimal places* *♣round decimals with one decimal place to the nearest whole number* *♣ recognise and write decimal equivalents to ¼, ½, ¾* *♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths* *♣ estimate, compare and calculate different measures, including money in pounds and pence* *♣ solve simple measure and money problems involving fractions and decimals to two decimal places*. ♣Recognise and write decimal equivalents of any number of tenths or hundredths ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths ♣Solve simple measure and money problems involving fractions and decimals to two decimal places ♣convert between different units of measure (for example km to m) ♣ round decimals with two decimal places to the nearest whole number and to one decimal place ♣ read, write, order and compare numbers with up to three decimal places		Measurement: 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.* ♣ solve problems involving converting between units of time	Statistics *♣ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.* *♣ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs* ♣solve comparison, sum and difference problems using information presented in a line graph ♣ complete, read and interpret information in tables, including timetables		Geometry: Properties of shape *♣compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes* *♣ identify acute and obtuse angles and compare and order angles up to two right angles by size* *♣ identify lines of symmetry in 2-D shapes presented in different orientations* *♣ complete a simple symmetric figure with respect to a specific line of symmetry* identify 3-D shapes, including cubes and other cuboids, 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 (º) ♣ identify: angles at a point and one whole turn (total 360º) , angles at a point on a straight line and 1/2 a turn (total 180º), other multiples of 90º ♣ use the properties of rectangles to deduce related facts and find missing lengths and angles ♣ distinguish between regular and irregular polygons based on reasoning about equal sides and angles.			Geometry: Position and Direction *♣describe positions on a 2-D grid as coordinates in the first quadrant* *♣ describe movements between positions as translations of a given unit to the left/right and up/down* *♣ plot specified points and draw sides to complete a given polygon. (not found in WRM)* ♣identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	*Y4 consolidation* *♣Convert between different units of measure [for example, kilometre to metre; hour to minute]* Y5 Converting Units and volume ♣convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) ♣ solve problems involving converting between units of time ♣ understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints ♣ estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] ♣use all four operations to solve problems involving measure		Consolidation

Maths Year 4 and 5: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL

Maths Medium Term Plan Year 5 *and Year 6*

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and Place Value** ♣ read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit ♣ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ♣ interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero ♣ round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ♣ solve number problems and practical problems that involve all of the above ♣ read Roman numerals to 1000 (M) and recognise years written in Roman numerals. *♣read, write, order and compare numbers up to 10 000 000 and determine the value of each digit required degree of accuracy* *♣ round any whole number to a required degree of accuracy* *♣ use negative numbers in context, and calculate intervals across zero* *♣ solve number and practical problems that involve all of the above*		Number: Four Operations ♣ add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) ♣ add and subtract numbers mentally with increasingly large numbers ♣ 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. ♣ multiply and divide numbers mentally drawing upon known facts ♣ 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 ♣ 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 ♣identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers ♣multiply by 10,100 and 1000 ♣ know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers ♣ establish whether a number up to 100 is prime and recall prime numbers up to 19 ♣ recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}) ♣ solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. ♣ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign *♣multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication* *♣ divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context* *♣ divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context* *♣ perform mental calculations, including with mixed operations and large numbers* *♣ identify common factors, common multiples and prime numbers* *♣ use their knowledge of the order of operations to carry out calculations involving the four operations* *♣ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Mathematics* *♣ solve problems involving addition, subtraction, multiplication and division* *♣ use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.*			Number: Fractions ♣compare and order fractions whose denominators are all multiples of the same number ♣ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ♣ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example,2/5 + 4/5 = 6/5 = 1 1/5] ♣ add and subtract fractions with the same denominator and denominators that are multiples of the same number ♣ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams ♣ read and write decimal numbers as fractions [for example, 0.71 = 71/100] ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. *♣use common factors to simplify fractions; use common multiples to express fractions in the same denomination* *♣ compare and order fractions, including fractions > 1* *♣ add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions* *♣ multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ × ½ = 1/8]* *♣ divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]* *♣ associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 1/8]*			

Spring	**Number: Decimals and Percentages** ♣ read, write, order and compare numbers with up to three decimal places ♣ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ♣ round decimals with two decimal places to the nearest whole number and to one decimal place ♣ solve problems involving number up to three decimal places ♣ 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 which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25. ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths *♣ identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places* *♣ multiply one-digit numbers with up to two decimal places by whole numbers* *♣ use written division methods in cases where the answer has up to two decimal places* *♣ solve problems which require answers to be rounded to specified degrees of accuracy* *♣solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison* *♣ recall and use equivalences between simple fractions, decimals and percentages, including in different context*	Y5: Number: Decimals ♣Recognise and write decimal equivalents of any number of tenths or hundredths ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths ♣Solve simple measure and money problems involving fractions and decimals to two decimal places ♣convert between different units of measure (for example km to m) *Y6: Number: Algebra* *♣use simple formulae* *♣ generate and describe linear number sequences* *♣ express missing number problems algebraically* *♣ find pairs of numbers that satisfy an equation with two unknowns* *♣ enumerate possibilities of combinations of two variables* *Teachers may choose to recap adding and subtracting decimals.*	Measurement: Converting Units ♣convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) ♣ solve problems involving converting between units of time ♣ understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints *♣ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate* *♣ use, read, write and convert between standard units, converting measurements of length, mass, volume and*	Measurement: Perimeter, Area and Volume ♣ measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ♣ calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes. ♣ estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] ♣use all four operations to solve problems involving measure *♣recognise that shapes with the same areas can have different perimeters and vice versa* *♣ recognise when it is possible to use formulae for area and volume of shapes* *♣ calculate the area of parallelograms and triangles* *♣ 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 [for example, mm³ and km³].*	Y5: Consolidation: Fractions Use assessment to identify gaps in learning to be consolidated for the large amount ot content to be covered in the Autumn term *Y6: Number: Ratio* *♣ solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts* *♣ solve problems involving similar shapes where the scale factor is known or can be found* *♣ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples*	Statistic ♣solve comparison, sum and difference problems using information presented in a line graph ♣ complete, read and interpret information in tables, including timetables *♣illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius* *♣ interpret and construct pie charts and line graphs and use these to solve problems* *♣ calculate and interpret the mean as an average.*

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
						time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places *♣ convert between miles and kilometres*						
Summer	Geometry: Properties of shape ♣identify 3-D shapes, including cubes and other cuboids, 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 ½ a turn (total 180°), other multiples of 90° ♣ use the properties of rectangles to deduce related facts and find missing lengths and angles ♣ distinguish between regular and irregular polygons based on reasoning about equal sides and angles. *♣draw 2-D shapes using given dimensions and angles* *♣ recognise, describe and build simple 3-D shapes, including making nets* *♣ compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons* *♣ recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles*		Geometry: Position and Direction ♣identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed *♣ 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*	Y5: Consolidation: Four Operations Use assessment data to consolidate gaps in learning *Y6: Assessment* *During this time, it is likely that children will be undertaking their SATS*		*Year 6* *Investigations*	Y5: Consolidation FDP Use assessment data to consolidate gaps in learning		Y5: consolidation: Measures Use assessment data to consolidate gaps in learning		Consolidation	

LSP Maths Plans

2020-2021

Year Specific Medium Term Plans

Medium Term Plan Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number and Place Value – within 10 ♣count to and across 10, forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 10 in numerals; count in multiples of 2s, 5s and 10s ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least				Addition and subtraction – within 10 ♣read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs ♣represent and use number bonds and related subtraction facts within 10 ♣add and subtract one-digit and two-digit numbers to 20, including 0 ♣solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? − 9				Shape ♣recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] ♣recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]	Number and Place Value – within 20 ♣count to and across 20 forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 20 in numerals and words ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least		Consolidation
Spring	Addition and subtraction – within 20 ♣read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs ♣represent and use number bonds and related subtraction facts within 20 ♣add and subtract one-digit and two-digit numbers to 20, including 0 ♣solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? − 9				Number and Place Value – within 50 ♣count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 50 in numerals and words; ♣count in multiples of 2s, 5s ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least			Measurement ♣Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ♣measure and begin to record the following: lengths and height	Measurement ♣Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] ♣capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ♣measure and begin to record the following: mass/weight capacity and volume		Consolidation
Summer	Multiplication and division ♣Count in multiples of 2,5 and 10 ♣solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher		Fractions ♣recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity ♣recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity ♣Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ♣Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than]	Position and direction ♣describe position, direction and movement, including whole, half, quarter and three-quarter turns	Number and place value -within 100 ♣count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ♣count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s ♣given a number, identify 1 more and 1 less ♣identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	Money ♣recognise and know the value of different denominations of coins and notes	Time ♣Measure and begin to record time [for example, quicker, slower, earlier, later] time (hours, minutes, seconds) ♣sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] ♣recognise and use language relating to dates, including days of the week, weeks, months and years ♣tell the time to the hour and half past the hour and draw the hands on a clock face to show these times		Consolidation

Maths Medium Term Plan Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number and place value** ♣count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward ♣ recognise the place value of each digit in a two-digit number (tens, ones) ♣ identify, represent and estimate numbers using different representations, including the number line ♣ compare and order numbers from 0 up to 100; use <, > and = signs ♣ read and write numbers to at least 100 in numerals and in words ♣ use place value and number facts to solve problems. Year 1: read and write numbers to at least 100 in numerals and words			**Number: Addition and Subtraction** ♣solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ♣ add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and ones • a two-digit number and tens • two two-digit numbers • adding three one-digit numbers ♣ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot ♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.					**Measurement and money** ♣recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value ♣ find different combinations of coins that equal the same amounts of money ♣ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change		**Multiplication and division** ♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs ♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. ♣recall and use multiplication and division facts for 2,5,and 10 times tables, including recognising odd and even numbers	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	**Multiplication and division** ♣recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs ♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.		**Number and Statistics** ♣interpret and construct simple pictograms, tally charts, block diagrams and simple tables ♣ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ♣ ask and answer questions about totalling and comparing categorical data.		**Geometry: Property of Shape** ♣identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ♣ identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid] ♣ compare and sort common 2-D and 3-D shapes and everyday objects			**Number: Fractions** ♣ recognise, find, name and write fractions ½, 1/3, 2/4, and ¾ of a length, shape, set of objects or quantity ♣ write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½ .			**Length and height** ♣choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); using rulers, scales, ♣compare and order lengths and record the results using >, < and =	**Consolidation**
Summer	**Geometry: position and direction** ♣ order and arrange combinations of mathematical objects in patterns and sequences ♣ use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).		**Problem solving efficient methods**		**Measurement: Time** ♣ compare and sequence intervals of time ♣ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times ♣ know the number of minutes in an hour and the number of hours in a day			**Measurement: Mass. Capacity and temperature** ♣Choose and use appropriate standard units to estimate and measure (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using thermometers and measuring vessels ♣ compare and order, mass, volume/capacity and record the results using >, < and =		**Investigations**	

Year 2: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL.

Maths Medium Term Plan Year 3

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<tr><td>Autumn</td><td colspan="3">Number and Place Value
♣count from 0 in multiples of 4, 8, 50 and 100;
♣ find 10 or 100 more or less than a given number
♣ recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
♣ compare and order numbers up to 1000
♣ identify, represent and estimate numbers using different representations
♣ read and write numbers up to 1000 in numerals and in words
♣ solve number problems and practical problems involving these ideas</td><td colspan="5">Addition and subtraction
♣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.</td><td colspan="3">Number: Multiplication and Division
♣count from 0 in multiples of 4, 8
♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
♣ 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 division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</td><td>Consolidation</td></tr>
<tr><td>Spring</td><td colspan="3">Number: Multiplication and Division
♣recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
♣ 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 division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</td><td>Measurement: Money
♣add and subtract amounts of money to give change, using both £ and p in practical contexts</td><td colspan="2">Statistics
♣ 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.</td><td colspan="3">Measurement: Length and Perimeter
♣measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g), volume and capacity (l/ml)
♣ measure the perimeter of simple 2-D shapes</td><td colspan="2">Number: Fractions
♣count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 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
♣ solve problems that involve all of the above.</td><td>Consolidation</td></tr>
<tr><td>Summer</td><td colspan="3">Number: Fractions
♣ 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
♣ solve problems that involve all of the above</td><td colspan="2">Measurement: 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 and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, a.m./p.m., morning, afternoon, noon and midnight
♣ know the number of seconds in a minute and the number of days in each month, year and leap year
♣ compare durations of events [for example to calculate the time taken by particular events or tasks].</td><td colspan="2">Geometry: Properties of Shape
♣draw 2-D shapes and make 3-D shapes using modelling materials;
♣recognise 3-D shapes in different orientations and describe 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</td><td colspan="3">Measurement: Capacity
♣measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml)</td><td>Consolidation</td></tr>
</table>

Maths Medium Term Plan Year 4

<table>
<tr><th></th><th>Week 1</th><th>Week 2</th><th>Week 3</th><th>Week 4</th><th>Week 5</th><th>Week 6</th><th>Week 7</th><th>Week 8</th><th>Week 9</th><th>Week 10</th><th>Week 11</th><th>Week 12</th></tr>
<tr><td>Autumn</td><td colspan="4">Number and Place Value
♣count in multiples of 6, 7, 9, 25 and 1000
♣ find 1000 more or less than a given number
♣ count backwards through zero to include negative numbers
♣ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
♣ order and compare numbers beyond 1000
♣ identify, represent and estimate numbers using different representations
♣ round any number to the nearest 10, 100 or 1000
♣ solve number and practical problems that involve all of the above and with increasingly large positive numbers
♣ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</td><td colspan="3">Addition and subtraction
♣add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
♣ estimate and 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</td><td>Measurement: Length and Perimeter
♣Convert between different units of measure [for example, kilometre to metre; hour to minute]
♣ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</td><td colspan="3">Number: Multiplication and Division
♣recall multiplication and division facts for multiplication tables up to 12 × 12
♣ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
♣count in multiples of 6, 7, 9, 25 and 1000
♣ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers</td><td>Consolidation</td></tr>
<tr><td>Spring</td><td colspan="2">Number: Multiplication and Division
♣recall multiplication and division facts for multiplication tables up to 12 × 12
♣ 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
♣ recognise and use factor pairs and commutativity in mental calculations
♣ 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, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</td><td>Measurement: Area
♣ find the area of rectilinear shapes by counting squares</td><td colspan="3">Number: Fractions
♣recognise and show, using diagrams, families of common equivalent fractions
♣ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
♣ 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
♣ add and subtract fractions with the same denominator</td><td colspan="4">Number: Decimals
♣recognise and write decimal equivalents of any number of tenths or hundredths
♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
♣ solve simple measure and money problems involving fractions and decimals to two decimal places.
♣Convert between different units of measure e.g. metres to kilometres.</td><td>Consolidation</td></tr>
</table>

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Number: Decimals ♣compare numbers with the same number of decimal places up to two decimal places ♣round decimals with one decimal place to the nearest whole number ♣ recognise and write decimal equivalents to ¼, ½, ¾ ♣ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Measurement: Money ♣ estimate, compare and calculate different measures, including money in pounds and pence ♣ solve simple measure and money problems involving fractions and decimals to two decimal places.			Measurement: Time ♣ 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.		Statistics ♣ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ♣ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Geometry: Properties of Shape ♣compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ♣ identify acute and obtuse angles and compare and order angles up to two right angles by size ♣ identify lines of symmetry in 2-D shapes presented in different orientations ♣ complete a simple symmetric figure with respect to a specific line of symmetry			Geometry: Position and direction ♣describe positions on a 2-D grid as coordinates in the first quadrant ♣ describe movements between positions as translations of a given unit to the left/right and up/down **♣ plot specified points and draw sides to complete a given polygon.** **Can't find in WRM**	Consolidation

Year 4: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL.

Maths Medium Term Plan Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number and Place Value ♣ read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit ♣ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ♣ interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero ♣ round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ♣ solve number problems and practical problems that involve all of the above ♣ read Roman numerals to 1000 (M) and recognise years written in Roman numerals.			Addition and subtraction ♣ add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) ♣ add and subtract numbers mentally with increasingly large numbers ♣ 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.		Statistics ♣solve comparison, sum and difference problems using information presented in a line graph ♣ complete, read and interpret information in tables, including timetables		Number: Multiplication and Division ♣ multiply and divide numbers mentally drawing upon known facts ♣multiply by 10,100 and 1000 ♣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 (nonprime) numbers ♣ establish whether a number up to 100 is prime and recall prime numbers up to 19 ♣ recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) ♣ solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.		Measurement: Area and Perimeter ♣ measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ♣ calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.		Consolidation
Spring	Number: Multiplication and Division ♣ 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 ♣ multiply and divide numbers mentally drawing upon known facts ♣ 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 ♣ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign			Number: Fractions ♣compare and order fractions whose denominators are all multiples of the same number ♣ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ♣ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5] ♣ add and subtract fractions with the same denominator and denominators that are multiples of the same number ♣ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams ♣ read and write decimal numbers as fractions [for example, 0.71 = 71/100] ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.				Number: Decimals and Percentages ♣ read, write, order and compare numbers with up to three decimal places ♣ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ♣ round decimals with two decimal places to the nearest whole number and to one decimal place ♣ solve problems involving number up to three decimal places ♣ 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 which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.		Consolidation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Number: Decimals ♣Recognise and write decimal equivalents of any number of tenths or hundredths ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths ♣Solve simple measure and money problems involving fractions and decimals to two decimal places ♣convert between different units of measure (for example km to m)				Geometry: Properties of Shape ♣identify 3-D shapes, including cubes and other cuboids, 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 ½ a turn (total 180°), other multiples of 90° ♣ use the properties of rectangles to deduce related facts and find missing lengths and angles ♣ distinguish between regular and irregular polygons based on reasoning about equal sides and angles.			Geometry: Position and Direction ♣identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Measurement: Converting Units ♣convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) ♣ solve problems involving converting between units of time ♣ understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints		Measurement: Volume ♣ estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] ♣use all four operations to solve problems involving measure	Consolidation

Maths Medium Term Plan Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number and Place Value ♣read, write, order and compare numbers up to 10 000 000 and determine the value of each digit ♣ round any whole number to a required degree of accuracy ♣ use negative numbers in context, and calculate intervals across zero ♣ solve number and practical problems that involve all of the above		Number: Addition, subtraction and Multiplication and Division ♣multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication ♣ divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context ♣ divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context ♣ perform mental calculations, including with mixed operations and large numbers ♣ identify common factors, common multiples and prime numbers ♣ use their knowledge of the order of operations to carry out calculations involving the four operations ♣ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why ♣ solve problems involving addition, subtraction, multiplication and division ♣ use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.				Number: Fractions ♣use common factors to simplify fractions; use common multiples to express fractions in the same denomination ♣ compare and order fractions, including fractions > 1 ♣ add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions ♣ multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ × ½ = 1/8] ♣ divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6] ♣ associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 1/8]				Geometry: Position and Direction ♣ 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	Consolidation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	Number: Decimals ♣ identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places ♣ multiply one-digit numbers with up to two decimal places by whole numbers ♣ use written division methods in cases where the answer has up to two decimal places ♣ solve problems which require answers to be rounded to specified degrees of accuracy		Number Percentages ♣solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison ♣ recall and use equivalences between simple fractions, decimals and percentages, including in different context		Number: Algebra ♣use simple formulae ♣ generate and describe linear number sequences ♣ express missing number problems algebraically ♣ find pairs of numbers that satisfy an equation with two unknowns ♣ enumerate possibilities of combinations of two variables		Measures: Converting Units ♣ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate ♣ use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ♣ convert between miles and kilometres	Measure: Area, Perimeter and Volume ♣recognise that shapes with the same areas can have different perimeters and vice versa ♣ recognise when it is possible to use formulae for area and volume of shapes ♣ calculate the area of parallelograms and triangles ♣ calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].		Number: Ratio ♣ solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts ♣ solve problems involving similar shapes where the scale factor is known or can be found ♣ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples		Consolidation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Geometry: Properties of Shape ♣draw 2-D shapes using given dimensions and angles ♣ recognise, describe and build simple 3-D shapes, including making nets ♣ compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons ♣ recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles		Problem Solving			Statistics ♣illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius ♣ interpret and construct pie charts and line graphs and use these to solve problems ♣ calculate and interpret the mean as an average.		Investigations				Consolidation

Year 6: Medium term maths overview, with National Curriculum references, based on the White Rose Maths SOL.