St Mary and St Peter Catholic Primary School

Maths Curriculum overview and coverage 2022-23

This long term planning has been adapted from the White Rose Maths resources.

Year 1 – Yearly Overview

	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	Place Value (focusing to 10, extending to 20)					Addition and Subtraction				Measures-Money	Multiplication	
Spring	Place Value (up to 50)	Addition and Subtraction				Multiplication and Division			2D Geometry	Fractions		Consolidation
Summer	Fractions		Place Value (up to 100)	Addition and Subtraction		Time	3D Geometry	Four operations in contexts up to 100		Measures		Consolidation

Out of Maths Lesson Coverage—

Recognise and know the value of different denominations of coins and notes.

Recognise and use language relating to dates, including days of the week, weeks, months and years.

Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.

Compare, describe and solve practical problems for: lengths and heights for example, long/short longer/short er, tall/short, double/half

Number: Place Value	Number: Addition and Subtraction	Measures-Money	Number: Multiplication
Count to ten, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 20 in numerals and words, identifying odd and even number. 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. Given a number, identify one more or one less. Count, read and write numbers to 100 in numerals. Count in multiples of twos.	Add and subtract one digit numbers (to 20), including zero. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts (within and including 10 and to 20) Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.	Recognise and know the value of different denominations of coins and notes.	Count in multiples of twos, fives and tens. Double numbers up to 20. Solve one step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Place Value	Number: Addition and Subtraction.	Number: Multiplication and Division	Geometry- 2D Shapes	Number: Fractions.
Given a number, identify 1 more or 1 less. Order numbers up to 100. Count, read and write numbers to 100 in numerals. 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 multiples of twos. Identify the numbers of ones and tens in a two digit number.	Add and subtract one digit numbers (to 20), including zero. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent, reason with and use number bonds and related subtraction facts (within 20) Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.	Count in multiples of twos, fives and tens. Halve even numbers up to 20. 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 if needed).	Recognise and name common 2D, including rectangles, squares, circles and triangles in different orientations and sizes. .	Recognise, find and name a half as one of two equal parts of an object or shape. Recognise, find and name a quarter as one of four equal parts of an object or shape.

Number: Fractions	Place Value	Number- Addition and Subtraction	Measurement: Time	Geometry- 3D	Four Operations in Contexts	Measures
Recognise, find and name a half as one of two equal parts of an object or shape or quantity.

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | Order and compare numbers up to 100.

Count, read and write numbers to 100 in numerals.

Identify the numbers of ones and tens in a two digit number. | Add and subtract one digit numbers (to 50), including zero.

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.

Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. | Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] and measure and begin to record time (hours, minutes, seconds) | Recognise and name common 3D shapes in different orientations and sizes, including cuboids, pyramids and spheres. | Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. | Compare, describe and solve practical problems for: lengths and heights for example, long/short longer/shorter, tall/short.

Measure and begin to record lengths and heights using standard and non-standard units. |

Year 2 – Yearly Overview

	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	Place Value				Addition and Subtraction			Addition and Subtraction with Money	**Multiplication** and Division		Time	Geometry
Spring	Place Value	Addition and Subtraction	Multiplication and **Division**		Fractions			Additional and Subtraction			Multiplication and Division	
Summer	Geometry	Measures (including 4 operations)	Interpreting Data	Consolidation	Fractions (?KS1 SATs)		Measures	Four Operations			Consolidation	

Out of Maths Lesson Coverage—

Find different combinations of coins that equal the same amounts of money.

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

Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales.

Compare and order length and mass and record the results using >, < and =.

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

Place Value	Addition and Subtraction	Addition and Subtraction (with money)	Multiplication and Division	Time	Geometry
Count in steps of 2 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) and partition in different ways.

Identify, represent and estimate numbers to 100 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 words.

Use place value and number facts to solve problems. | 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.

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. | 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

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. | Recall and use multiplication facts for the 2, 5 and 10 times tables, including recognizing odd and even numbers.

Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. | 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. | Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.

Compare and sort common 2D shapes and everyday objects.

Order and arrange combinations of mathematical objects in patterns and sequences. |

Place Value	Addition and Subtraction	Multiplication and Division	Fractions	Addition and Subtraction	Multiplication and Division
Count in steps of 2, 3 ,5 and 10 from 0 and in tens from any number, forward and backward. . Compare and order numbers from 0 up to 100; use <, > and = signs. Use place value and number facts to solve problems.	Show that the 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.	Recall and use division facts for the 2, 5 and 10 times tables, including recognizing odd and even numbers. Calculate mathematical statements for division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign.	Recognise, find, name and write fractions , ½, 1/3 ¼, of a length, shape, set of objects or quantity. Write simple fractions for example, ½ of 6 = 3 Recognise the equivalence of 1/2 and 2/4	Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 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. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 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 and solve missing number problems.	Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognizing odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Geometry	Measures (including four operations)	Interpreting Data	Fractions	Measures	Four Operations
Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.

Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid.]

Compare and sort common 3D shapes and everyday objects. | Find different combinations of coins that equal the same amounts of money.

Choose and use appropriate standard units to estimate and measure capacity (litres/ml) and temperature (oC) to the nearest appropriate unit, using thermometers and measuring vessels.

Compare and order volume/capacity and record the results using
>, < and =. | Ask+ answer simple questions by counting the number of objects in each category and sorting the categories by quantity.

Ask and answer questions about totaling and comparing categorical data | Recognise, find, name and write fractions   2/4. ¾ , ½, ¼ mad 1/3 of a length, shape, set of objects or quantity.

Write simple fractions for example, ½ of 6 = 3

Recognise the equivalence of 1/2 and 2/4 . | Find different combinations of coins that equal the same amounts of money.

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales.

Compare and order length and mass and record the results using >, < and =. | Use place value and number facts to solve problems.

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 and solve missing number problems.

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. |

Year 3 – Yearly Overview

	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	Place `Value				Addition and Subtraction				**Multiplication** and Division			Geometry
Spring	Place Value		Multiplication and **Division**		Fractions				Measures (money focus)		Addition and Subtraction	Consolidation
Summer	Fractions and Decimals		Time (focus on solving problems)		Geometry		Four Operations		Measures			Consolidation

- Estimate the answer to a calculation and use inverse operations to check answers.

- make 3-D shapes using modelling materials

- 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.

- Compare durations of events (for example to calculate the time taken by particular events or tasks).

- Continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed and simple equivalents of mixed units

- Measure, compare, add and subtract: lengths (m/cm/mm).

- *Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).*

- 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

Place Value	Addition and Subtraction	Multiplication and Division	Geometry
Identify, represent and estimate numbers using different representations.

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) and partition in different ways.

Compare and order numbers up to 1000, including using < = >.

Read and write numbers up to 1000 in numerals and in words.

Solve number problems and practical problems involving these ideas. | 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 a appropriate method.

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. | Recall and use multiplication and division facts for the 3, 4, 6 and 8 multiplication tables.

Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context. | Draw , identify and classify 2-D shapes based on their properties, including horizontal and vertical lines.

Recognise 3-D shapes in different orientations and describe them. |

Place Value	Multiplication and Division	Fractions	Measures (money)	Addition and Subtraction
Count from 0 in multiples of 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) and partition in different ways.	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Add and subtract fractions with the same denominator within one whole. Compare and order unit fractions, and fractions with the same denominators. Recognise and show, using diagrams, equivalent fractions with small denominators. Solve problems that involve all of the above.	Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Add and subtract amounts of money to give change, using both £ and p in practical contexts. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction using an appropriate mental or written method.

Fractions and Decimals	Time (solving problems)	Geometry- Angles	Four Operations	Measures
Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 Count up and down in tenths.	Tell and write the time from an analogue clock, including 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute. Know the number of seconds in a minute and the number of days in each month, year and leap year.	Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-term, 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.	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2D shapes.

Year 4 – Yearly Overview

	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	Place Value (including decimals)				Addition and Subtraction			Perimeter	Multiplication and Division			
Spring	Place Value (including decimals)		Addition and Subtraction		Multiplication and Division		Fractions				Area and Perimeter	
Summer	Four Operations (including with decimals)				Geometry (properties of shape)	Geometry (Position and Direction)	Fractions		Measures (including using time)		Statistics	Consolidation

- Estimate and use inverse operations to check answers to a calculation.
- Identify lines of symmetry in 2D shapes presented in different orientations.
- Complete an simple symmetric figure respect to a specific line of symmetry.
- Estimate, compare and calculate different measures, including money in pounds and pence.
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
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- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Place value (incl decimals)	Addition and Subtraction	Perimeter	Multiplication and Division
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. Round any number to the nearest 10, 100 or 1000. Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Add and subtract whole numbers numbers with up to 4 digits using an appropriate <u>written or mental</u> method. Estimate and use inverse operations to check answers to a calculation and solve problems. Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why . Solve simple measure problems involving addition and subtraction.	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimeters and meters	Recall and use multiplication and division facts for multiplication tables up to 12 x 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. Multiply two digit and three digit numbers by a one digit number using an appropriate method. 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.

Place value (incl decimals)	Addition and Subtraction	Multiplication and Division	Fractions	Area and Perimeter
Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones) partitioning in different ways. Round any number to the nearest 10, 100 or 1000. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places. Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Add and subtract whole numbers and decimals using an appropriate written method. Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why . Solve simple measure and money problems involving fractions and decimals to two decimal places.	Recall and use multiplication and division facts for multiplication tables up to 12 x 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 an appropriate method.	Recognise and show, using diagrams, families of common equivalent fractions. 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	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimeters and meters Find the area of rectilinear shapes by counting squares, and begin to understand the formula for the area of a rectangle

Four Operations (Including with decimals)	Geometry- Properties of shape.	Geometry- Position and Direction	Fractions	Measures, Including time.	Statistics
Add and subtract whole numbers and decimals using an appropriate written method. Find the effect of dividing a one or two digit number by 10 or 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. Multiply two digit and three digit numbers by a one digit number using an appropriate method. 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.	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. .	Describe positions on a 2D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/ right and up/ down.	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 Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to ¼, ½, ¾	Convert between different units of measure [for example, kilometer to meter] Estimate, compare and calculate different measures, including money in pounds and pence. Convert between different units of measure e.g. hour to minute. Read, write & convert time between analogue and digital 12 and 14 hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	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

Year 5 – Yearly Overview

	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	Place Value (including decimals)				Addition and Subtraction			Multiplication and Division			Area and Perimeter	
Spring	Addition and Subtraction		Multiplication and Division		Proportionality							Consolidation
Summer	Properties of Number		Geometry (Angles)		Measures (including time problems)		Statistics	Properties of Shape	Geometry- Position and Direction	Four operations (problem solving) Consolidation		

- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.

- Estimate and compare volume.

- Measure using a range of units (mass, length and capacity)

- Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml)

- Solve comparison, sum and difference problems using information presented in a line graph.

- Complete, read and interpret information in tables

- Identify 3D shapes, including cubes and other cuboids, from 2D representations.

Place value (incl decimals)	Addition and Subtraction	Multiplication and Division	Area and Perimeter
Read, write, order and compare numbers to at least 1,000,000 including numbers with up to two decimal places and and determine the value of each digit . Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. Multiply and divide whole numbers and decimals by 10, 100 and 1000. Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000 and round numbers with up to two decimal places. Solve number problems and practical problems that involve all of the above.	Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits, including using an appropriate method. 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 and divide whole numbers by 10, 100 and 1000. Multiply numbers up to 4 digits by a one or two digit number using a an appropriate written method. Divide numbers up to 4 digits by a one digit number using an appropriate method of and interpret remainders appropriately for the context. Solve problems involving multiplication and division.. Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign	Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (including squares), and including using standard units, cm^2, m^2 estimate the area of irregular shapes.

Addition and Subtraction	Multiplication and Division	Proportionality
Add and subtract numbers, including decimals, mentally with increasingly large numbers.

Add and subtract whole numbers with more than 4 digits and numbers with up to 3 decimal places, including using an appropriate method.

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 an appropriate written method.

Divide numbers up to 4 digits by a one digit number using an appropriate method of and interpret remainders appropriately for the context.

Solve problems involving multiplication and division..

Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign. | Compare and order fractions whose denominators are 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.

Calculate and solve problems which involve finding fractions of numbers and quantities, including simple scaling problems.

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.

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, 3/4, 1/5, 2/5, 3/5, 4/5
and those fractions with a
denominator of a multiple of 10 or 25.

Read and write decimal numbers as fractions [for example 0.71 = 71/200]

Read, write, order and compare numbers with up to three decimal places.

Round numbers with up to two decimal places. |

Properties of Number	Geometry (Angles)	Measure including time problems	Statistics	Properties of Shape	Geometry- Position and Direction	Four Operations
Recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3})

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

Establish whether a number up to 100 is prime and recall prime numbers up to 19 | 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 ½ a turn (total 180o) other multiples of 90o | Solving problems involving converting between units of time.

Calculations time durations including interpreting timetables.

Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml)

Solve problems involving converting between units of time.

Estimate volume. | Solve comparison, sum and difference problems using information presented in a line graph. | Identify 3D shapes, including cubes and other cuboids, from 2D representations.

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. | 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. | Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.

Calculate and solve problems which involve finding fractions of numbers and quantities, including simple scaling problems. |

Year 6 – Yearly Overview

	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	Place Value			Number Properties	Four Operations					Area and Perimeter		Geometry- Angles
Spring	Equivalence and Simplification of Fractions	Fractions as Numbers		Proportionality (including Ratio)				Algebra		Four Operations		Consolidation
Summer	Statistics	Consolidation (SATs Week 4/5)				Geometry		Post SATs Project Consolidation				

- Use estimation to check answers to calculations and determine in the context of a problem, an appropriate

- Illustrate and name parts of circles, including radius, diameter and circumferenc e and know that the diameter is twice the radius.

- Interpret and construct pie charts and line graphs and use these to solve problems.

- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.

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- 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 3dp.

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- Convert between miles and kilometres.

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Place Value	Number Properties	Four Operations	Area and Perimeter	Geometry- Angles
Read, write, order and compare numbers up to 10 000 000, and decimals with up to three decimal places, and determine the value of each digit, partitioning them in different ways. Round any number including decimals 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. Multiply numbers by 10, 100 and 1000 giving answers up to 3dp.	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, including problems which involve decimals, in contexts, deciding which operations and methods to use and why. Multiply multi-digit number up to 4 digits by a 2 digit number using an appropriate written method. Divide numbers up to 4 digits by a 1 and 2 digit whole numbers using the an appropriate written method, and interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context. Perform mental calculations, including with mixed operations and large numbers. 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	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 cm^3, m^3 and extending to other units (mm^3, km^3)	Measure, compare and classify geometric shapes based on their properties, angles 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. Draw 2D shapes using given dimensions and angles.

Equivalence and Simplification of Fractions	Fractions as numbers	Proportionality (including ratio)	Algebra	Four Operations
Identify and find equivalent fractions for any given fraction, including mixed number.

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

Compare and order fractions, including fractions > 1 including converting between mixed numbers and improper fractions. | Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.

Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example   x   =]

Divide proper fractions by whole numbers [for example   ÷ 2 =]

Generate and describe linear number sequences (with fractions) | 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

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example e.g. 3/8]

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison
.
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. | 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. | Solve problems involving addition, subtraction, multiplication and division.

Solve addition and subtraction multi step problems, including problems which involve decimals, in contexts, deciding which operations and methods to use and why.

Perform mental calculations, including with mixed operations and large numbers.

Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. |

Statistics	Consolidation/SATs	Geometry and Measure	Post SATs Project
Interpret and construct pie charts and line graphs and use these to solve problems. Calculate the mean as an average.		Illustrate and name parts of circles, including radius, diameter and circumference e and know that the diameter is twice the radius. 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 3dp. Convert between miles and kilometers. 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	