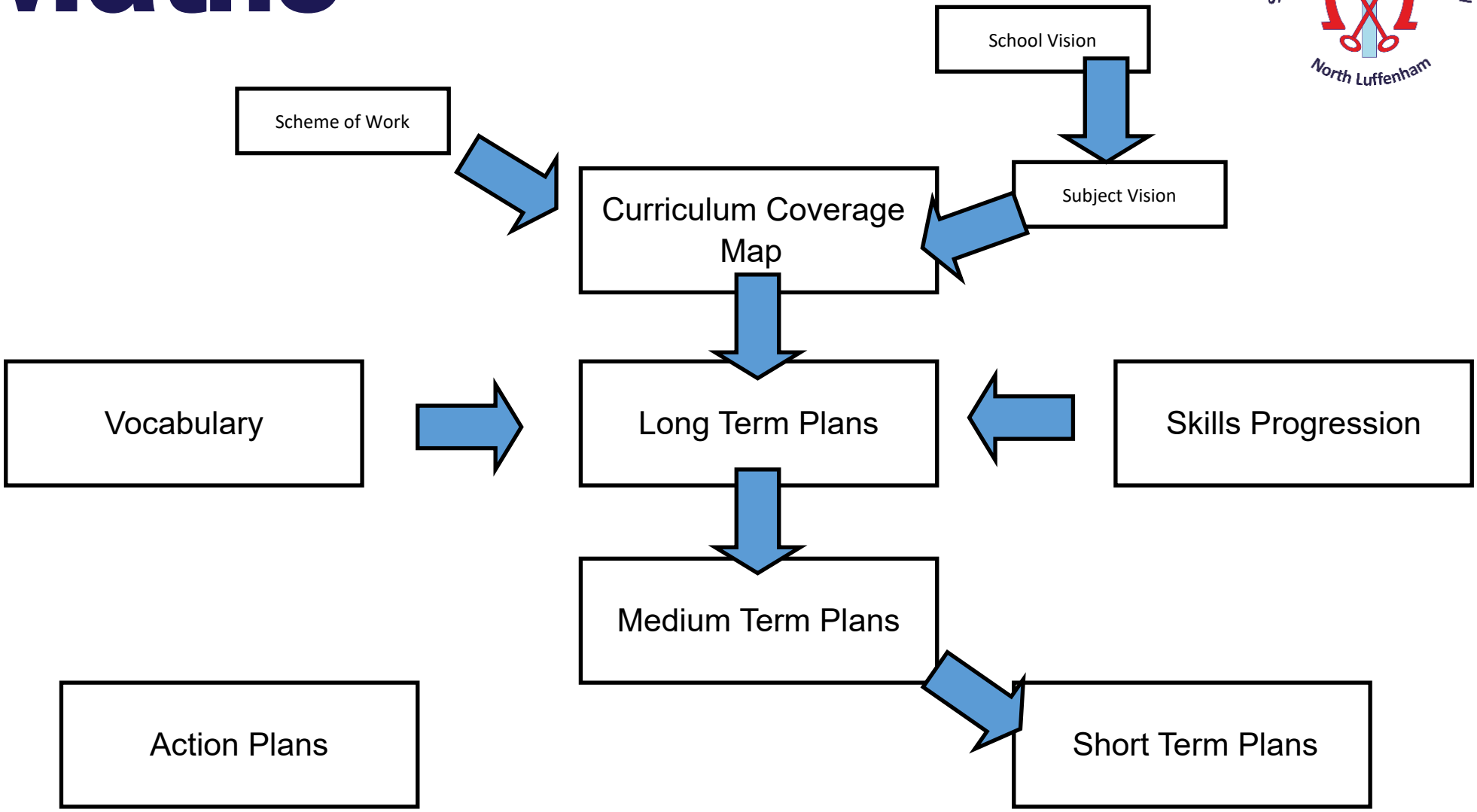
Maths

Academic Year 2025/2026

Includes: Curriculum Coverage Maps, Long Term Plans, Vocabulary Progression and Skills Progression

Maths


School Vision
Scheme of Work
Subject Vision
Curriculum Coverage Map
Vocabulary
Long Term Plans
Skills Progression
Medium Term Plans
Action Plans
Short Term Plans

Curriculum Coverage Map

Maths (KS1)

Academic Year 2022/2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Getting to Know You Just Like Me!	It's Me 1, 2, 3! Light and Dark	Alive in 5! Growing 6, 7, 8	Building 9 and 10	To 20 and Beyond First, Then, Now	Find My Pattern On the Move
Year 1	Number: Place Value (Within 10) Number: Addition and Subtraction (Within 10)	Number: Addition and Subtraction Geometry: Shape	Number: Place Value (Within 20) Number: Addition and Subtraction (Within 20)	Number: Place Value (Within 50) Measurement: Length and Height Measurement: Mass and Volume	Number: Multiplication and Division Number: Fractions Geometry: Position and Direction	Number: Place Value Measurement: Money Measurement: Time
Year 2	Number: Place Value Number: Addition and Subtraction	Number: Addition and Subtraction Geometry: Shape	Measurement: Money Number: Multiplication and Division	Number: Multiplication and Division Measurement: Length and Height Measurement: Mass, Capacity and Tempera-ture	Number: Fraction Measurement: Time	Statistics Geometry: Position and Direction

Curriculum Coverage Map

Maths (LKS2)

Academic Year 2022/2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Number: Place Value Number: Addition and Subtraction	Number: Addition and Subtraction Number: Multiplication and Division	Number: Multiplication and Division Measurement: Length and Perimeter	Number: Fractions Measurement: Mass and Capacity	Number: Fractions Measurement: Money Measurement: Time	Measurement: Time Geometry: Shape Statistics
Year 4	Number: Place Value Number: Addition and Subtraction	Number: Addition and Subtraction Measurement: Area Number: Multiplication and Division	Number: Multiplication and Division Measurement: Length and Perimeter	Number: Fractions Number: Decimals	Number: Decimals Measurement: Money Measurement: Time	Geometry: Shape Statistics Geometry: Position and Direction

Curriculum Coverage Map

Maths (UKS2)

Academic Year 2022/2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	**Number: Place Value** **Number: Decimals** (Interleafing: Roman Numerals, Money, Rounding Decimals) **Number: Addition and Subtraction** (Interleafing: Decimals, Money, Perimeter, Shape(Y4)	**Number: Addition and Subtraction** (Interleafing: Decimals, Money, Perimeter, Shape(Y4) **Number: Multiplication and Division** **Measurement: Area** (Interleafing: Shape (Area), Conversion of Units, x and / by 10, 1000 and 1000)	**Number: Multiplication and Division and Area** (Interleafing: Squared and Cubed numbers, Volume and Shape) **Number: Fractions with Percentages** (Interleafing: FDP Equivalence, decimals, multiplication and statistics)	**Number: Fractions with Percentages** (Interleafing: FDP Equivalence, decimals, multiplication and statistics) **Geometry: Angles** (Interleafing: Types of triangles, translation, accuracy of measure, length)	**Statistics and Time** (Interleafing: Fractions, decimals (Scale) **Geometry: Position and Direction** (Interleafing: Perimeter, Angles)	**Geometry: 3d Shapes** (Interleafing: Volume, capacity, cubed numbers) **Party Planning, Consolidation and Learning Challenges**
Year 6	**Number: Place Value and Decimals** (Interleafing: Measurement (converting units Y5, Money, Roman Numerals) **Number: Addition and Subtraction** (Interleafing: Decimals add and subtract, Perimeter (Metric Units), Time)	**Number: Multiplication and Division** (Interleafing: Area (Y5), property of shape (3d), decimals, place value **Number: Fractions** (Interleafing: Multiplication and division facts (Multiples and factors), properties of shape (3d), area and perimeter, statistics	**Number: Percentages** (Interleafing: FDP, Statistics) **Number: Algebra** (Interleafing: Ration, inverse operations, shape (Formulae for area and perimeter) **Number: Ratio** (Interleafing: Fractions/Percentages)	**Measurement: Converting Units, Perimeter, Area and Volume** (Interleafing: Shape and Time) **Geometry: Properties of Shape** (Interleafing: Algebra, measure, multiplication, inverse **Geometry: Position and Direction**	**Statistics** (Interleafing: Four operations, angles, percentages, decimals)	Investigations and consolidating of units

Long Term Plan

Maths (Reception)

Academic Year 2022/2023

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Getting to Know You Opportunities for settling in, introducing the areas of provision and getting to know the children. Key times of day, class routines. Exploring the continuous provision inside and out. Where do things belong, positional language.			Just Like Me! Match and Sort. Compare Amounts. Compare Size, Mass and Capacity, Exploring Patterns.			It's Me 1 2 3! Representing 1, 2 and 3 Comparing 1, 2 and 3 Composition of 1, 2 and 3 Circles and Triangles Positional Language			Light and Dark Representing Numbers to 5 One More and Less Shapes with 4 Sides Time		
Spring Term	Alive in 5! Introducing Zero Comparing Numbers to 5 Composition of 4 and 5 Compare Mass (2) Compare Capacity (2)			Growing 6, 7, 8 6,7 and 8 Combining 2 amounts Making Pairs Length and Height Time			Building 9 and 10 Counting to 9 and 10 Comparing numbers to 10 Bonds to 10 3d—Shapes Spatial Awareness Patterns					
Summer Term	To 20 and Beyond Building Numbers beyond 10 Counting Patterns beyond 10 Spatial Reasoning (1) Match Rotate Manipulate			First Then Now Adding More Taking Away Spatial Reasoning (2) Compose and Decompose			Find my Pattern Doubling Sharing and Grouping Even and Odd Spatial Reasoning (3) Visualise and Build			On the Move Deepening Understanding Patterns and Relationships Spatial Reasoning (4) Mapping		

Long Term Plan

Maths (Year 1)

Academic Year 2022/2023

Autumn Term	**Number and Place Value** Read and write numbers from 1 to 20 in numerals and words. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Given a number, identify one more and one 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, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens	**Number – Addition and Subtraction** Read, write and interpret mathematical statements involving addition (+), and equals (=) signs Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving subtraction (–) and equals (=) signs Add and subtract one-digit and two-digit numbers to 20, including zero Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations	**Geometry – Properties of Shapes** Recognise and name common 2-D shapes, including: 2-D shapes (for example, rectangles (including squares), circles and triangles) Recognise and name common 3-D shapes, including: 3-D shapes (for example, cuboids (including cubes), pyramids and spheres)	
Spring Term	**Number and Place Value** Read and write numbers from 1 to 20 in numerals and words. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given 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 Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens Given a number, identify one more and one less.	**Number – Addition and Subtraction** 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 zero Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations	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 two-digit number and tens two two-digit numbers adding three one-digit numbers	**Measurement** Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half 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)
Summer Term	**Number – Multiplication and Division** 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.	**Number – Fractions** Recognise, find and name a half as one of two equal parts of an object, shape or quantity Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	**Measurement** Compare, describe and solve practical problems for: time (for example, quicker, slower, earlier, later) 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. Measure and begin to record the following: Time (hours, minutes, seconds) Recognise and know the value of different denominations of coins and notes	**Geometry – Position and Direction** Describe position, direction and movement, including whole, half, quarter and three-quarter turns.

Long Term Plan—Vocabulary

Maths (Year 1)

Academic Year 2022/2023

Number and Place Value Zero, one, two, three to twenty, and beyond, many, few, fewer, fewest, smallest, lesser, Equal to, the same as, Odd, even, Pair, Ten more/less, Digit, Figure(s), Compare (In) order/a different order, Size, Value, Between, halfway between, Above, below	**Shape** Hollow, Corner (point, pointed), Face, Make, Build, Draw	**Number – Addition and Subtraction** Near double, Halve. Equals, is the same as (including equals sign) , Difference between, How many more to make...? How many more is...than...? How much more is...? How many fewer is...than.? How much less is...?	**Fractions** Equal parts, four equal parts, a quarter, two quarters
Multiplication and Division Odd, even, Count in twos, threes, fives, Count in tens (forwards from/backwards from), How many times?, Lots of, groups of, Once, twice, three times, five times, Multiple of, times, multiply, Repeated addition, Double, halve, Share, share equally, Group in pairs, threes, etc. Equal groups of,	**Measurement** Scales, Spring, summer, autumn, winter, Week, month, year, Birthday, holiday , Evening, night, midnight, Before, after, Now, soon, early, late, Quick, quicker, quickest, quickly, fast, faster, fastest, slow, slower, slowest, slowly, Old, older, oldest, new, newer, newest, Takes longer, takes less time, Clock, watch, hands, How long ago? How long will it be to...? How often? Always, never, often, sometimes, usually, Low, wide, narrow, deep, thick, thin, Far, near, close, Metre, ruler, metre stick, Buy, sell, spend, spent, change, dear(er), costs more, costs less, cheaper, costs the same as		
Problem Solving Say, think, imagine, remember, Point to, Place, fit, Rearrange, Change, change over, Split, separate, Carry on, continue, repeat & what comes next?, Tell me, describe, pick out, talk about, explain, show me, Read, write, record, trace, copy, complete, finish, end, Fill in, shade, colour, tick, cross, draw, draw a line between, join (up), ring, arrow, Cost, Answer, check same number(s)/different number(s)/missing number(s), Number facts, number track, number square, Abacus, blocks, rods, die, pegs, peg board, Same way, different way, best way, another way, In order, in a different order, Not all, every, each		**Geometry – Position and Direction** Opposite, Apart, Edge, centre, Direction, Journey, Left, right, up, down, forwards, backwards, sideways, Across, Close, far, near, Along, through, To, from, towards, away from, Movement, Slide, roll, turn, whole turn, half turn, Stretch, bend	

Long Term Plan—Skills Progression

Maths (Year 1)

Academic Year 2022/2023

Number: Place Value	**EYFS:** Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10. Play games that involve moving along a numbered track, and understand that larger numbers are further along the track. Distribute items fairly, for example, put 3 marbles in each bag. Recognise when items are distributed unfairly.	**Year 2:** Count through the number system. Place value within 100. Compare and order numbers. Add and subtract within 100 Reason about the location of larger numbers within the linear number system. Compare and order numbers. Read scales. Begin to experience partitioning and combining numbers within 10. 1NF–1 Develop fluency in addition and subtraction facts within 10. Add and subtract across 10. All future additive calculation. Add within a column during columnar addition when the column sums to less than 10 (no regrouping). Subtract within a column during columnar subtraction when the minuend of the column is larger than the subtrahend (no exchanging). Recall the 2, 5 and 10 multiplication tables. Carry out repeated addition and multiplication of 2, 5, and 10, and divide by 2, 5 and 10. Identify multiples of 2, 5 and 10. Unitise in tens. Identify odd and even numbers.
Number: Addition and Subtraction	EYFS: Understand the cardinal value of number words, for example understanding that 'four' relates to 4 objects. Subitise for up to to 5 items. Automatically show a given number using fingers. Devise and record number stories, using pictures, numbers and symbols (such as arrows).	**Year 2:** Add and subtract within 10. Represent composition and decomposition of numbers using equations.
Geometry: Shape/ Position and Direction	EYFS: See, explore and discuss models of common 2D and 3D shapes with varied dimensions and presented in different orientations (for example, triangles not always presented on their base). Select, rotate and manipulate shapes for a particular purpose, for example: • rotating a cylinder so it can be used to build a tower • rotating a puzzle piece to fit in its place.	**Year 2:** Describe properties of shape. Categorise shapes. Identify similar shapes. Find the area or volume of a compound shape by decomposing into constituent shapes. Rotate, translate and reflect 2D shapes. Identify congruent shapes.
Measurement: Length and Heught	**Year 2:** choose and use appropriate standard units to estimate and **measure length/height in any direction (m/cm)**; mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, **using rulers,** scales, thermometers and measuring vessels **compare and order lengths,** mass, volume/capacity and record the results using >, < and =	

Long Term Plan—Skills Progression

Maths (Year 1)

Academic Year 2022/2023

Measurement: Weight and Volume	**Year 2:** **temperature (°C); capacity (litres/ml) to the nearest appropriate unit,** using rulers, **scales, thermometers and measuring vessels c**ompare and order lengths, **mass, volume/capacity** and record the results using >, < and =
Number: Multiplication and Division	**Year 2:** 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: Fractions	**Year 2:** recognise, find, name and write fractions 1/3 , 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2 .
Measurement: Money and Time	**Year 2:** 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. 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

Long Term Plan

Maths (Year 2)

Academic Year 2022/2023

Autumn Term

Number – Number and Place Value

Read and write numbers to at least 100 in numerals and in words.

Identify, represent and estimate numbers using different representations, including the number line. Compare and order numbers from 0 up to 100; use <, > and = signs

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)

Use place value and number facts to solve problems

Use place value and number facts to solve problems & count in steps of 2, 3, and 5 from 0, and in tens from any number forwards and backwards.

Number – Addition and Subtraction

Add 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, applying their increasing knowledge of mental and written methods, 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.

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations.

Show that the addition of two numbers can be done in any order (commutative and subtraction of one number from another cannot).

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;

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.

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

Geometry – Properties of Shapes

Identify and describe the properties of 2-D shapes, including the number of sides

Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces Compare and sort common 2-D and 3-D shapes and everyday objects.

Identify 2D shapes on the surface of 3D shapes.

Spring Term

Number – Multiplication and Division

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognizing 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 2, 5 and 10 multiplication tables.

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), 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 contexts.

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Measurement: Money

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

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

Measurement: Length and Height

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) using ruler.

Measurement: Mass, Capacity and Temperature

Choose and use appropriate standard units to estimate and measure: mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels.

Compare and order lengths, mass, volume/capacity and record the results using >, < and =

Summer Term

Measure: 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

Compare and sequence intervals of time.

Number – Fractions

Recognise, find, name and write fractions 1/3, ¼, ½ 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

Geometry – Position and Direction

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).

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.

Long Term Plan—Vocabulary

Maths (Year 2)

Academic Year 2022/2023

Number and Place Value Numbers to one hundred Hundreds Partition, recombine	**Shape** Size , bigger, larger, smaller Symmetrical, line of symmetry , fold, match Mirror line, reflection, pattern, repeating pattern	**Number – Addition and Subtraction** Array, row, column Inverse	**Fractions** Three quarters, one third, a third Equivalence, equivalent
Multiplication and Division Multiply by Divided by	**Measurement** Quarter past/to m/km, g/kg, ml/l Temperature (degrees C)	**Statistics** Count, tally, sort, vote Graph, block graph, pictogram, Represent, group, set, list, table	
Problem Solving Predict, prove Describe the pattern, describe the rule Find, find all, find different Investigate		**Geometry – Position and Direction** Rotation Clockwise, anticlockwise , straight line Ninety-degree turn, right angle	

Long Term Plan—Skills Progression

Maths (Year 2)

Academic Year 2022/2023

Number: Place Value	**Year 1:** Count within 100, forwards and backwards, starting with any number Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	**Year 3:** Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three digit multiples of 10. Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning Reason about the location of any three digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.
Number: Addition and Subtraction	**Year 1:** Develop fluency in addition and subtraction facts within 10. Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. Read, write and interpret equations containing addition ( ), subtraction ( ) and equals ( ) symbols, and relate additive expressions and equations to real life contexts.	Year 3: Secure fluency in addition and subtraction facts that bridge 10, through continued practice Calculate complements to 100. Add and subtract up to three-digit numbers using columnar methods. Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.
Number: Multiplication and Division	Year 1: 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	Year 3: 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
Measurement: Length and Height	Year 1: 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 heights	Year 3: measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Long Term Plan—Skills Progression

Maths (Year 2)

Academic Year 2022/2023

Measurement: Weight and Volume	Year 1: (weight and volume) 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 3: (mass, capacity) measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml
Geometry: Shape, Position/ Direction	Year 1: Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.	Year 3: Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. Draw polygons by joining marked points, and identify parallel and perpendicular sides.
Number: Fractions	Year 1: recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise find and name a quarter as one of four equal parts of an object, shape or quantity.	Year 3: Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts Find unit fractions of quantities using known division facts (multiplication tables fluency), reason about the location of any fraction within 1 in the linear number system, add and subtract fractions with the same denominator, within 1.
Measurement: Money and Time	Year 1: compare, describe and solve practical problems for: time (for example, quicker, slower, earlier, later) measure and begin to record the following: time (hours, minutes, seconds), sequence events in chronological order using language 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	Year 3: 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
Statistics	Year 1: None	Year 3: interpret and present data using bar charts, pictograms and table to 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

Long Term Plan

Maths (Year 3)

Academic Year 2022/2023

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Number: Place Value 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). Compare and order numbers up to 1000 Read and write numbers up to 1000 in numerals and in words. Solve number problems and practical problems involving these ideas. Count from 0 in multiples of 4, 8, 50 and 100			Number : 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.			Number: Multiplication and Division Count from 0 in multiples of 4, 8, 50 and 100 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 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 objectives.					
Spring Term	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 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 objects are connected to m objectives.			Measurement: Length and Perimeter Measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2D shapes.			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 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. Solve problems that involve all of the above.		Measurement: Mass and Capacity Measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).	
Summer Term	Number: Fractions Recognise and show, using diagrams, equivalent fractions with small denominators. Compare and order unit fractions, and fractions	with the same denominators. Add and subtract fractions with the same denominator within one whole Solve problems that involve all of the above. Measurement: Money	Add and subtract amounts of money to give change, using both £ and p in practical contexts. PSHE: About the role money plays in their own and others' lives, including how to manage their money and about being a critical consumer.	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 Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds, mins, 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 Geometry: Shape 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.	Draw 2-D shapes and make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. 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.			

Long Term Plan—Vocabulary

Maths (Year 3)

Academic Year 2022/2023

Number and Place Value

Numbers to one thousand

Shape

Horizontal, perpendicular and parallel lines

Quadrilaterals

Triangles

Number – Addition and Subtraction

Column addition and subtraction

Fractions & Decimals

Compare and order

Numerator, denominator

Fifth, two fifths, four fifths, tenths

Unit fraction, non-unit fraction

Equivalent

Multiplication and Division

Product

Multiples of four, eight, fifty and one hundred

Measurement

Leap year

Twelve- hour/twenty-four- hour clock

Roman numerals I to XIII

Statistics

Axis, axes

Chart, bar chart, frequency table,

Diagram

Carroll diagram,

Venn diagram

Problem Solving

Geometry – Position and Direction

Greater/less than ninety degrees

Orientation (same orientation, different orientation)

Perimeter and area

Long Term Plan

Maths (Year 4)

Academic Year 2022/2023

		Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Number: Place Value Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 more or less than a given number. 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. Count backwards through zero to include negative 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 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.			Measurement: Length and Perimeter Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Convert between different units of measure (for example, kilometre to metre) Number: Multiplication & Division Recall and use multiplication and division facts for multiplication tables up to 12 × 12.			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 three numbers. 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.	
Spring Term	Number: Multiplication & Division Recall and use 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 objects. Measurement: Area Find the area of rectilinear shapes by counting squares.			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.			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 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. Convert between different units of measure (for example, kilometre to metre)	
Summer Term	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 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 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. PSHE: About the role money plays in their own and others' lives, including how to manage their money and about being a critical consumer. Time: Convert between different units of measure (for example, kilometre to metre; hour to minute) ...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 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.			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. Plot specified points and draw sides to complete a given polygon. Describe movements between positions as translations of a given unit to the left/ right and up/ down.	

Long Term Plan—Vocabulary

Maths (Year 4)

Academic Year 2022/2023

Number and Place Value

Tenths, hundredths

Decimal (places)

Round (to nearest)

Thousand more/less than

Negative integers

Count through zero

Roman numerals (I to C)

Shape

Quadrilaterals

Triangles

Right angle, acute and obtuse angles

Number – Addition and Subtraction

Fractions & Decimals

Equivalent fraction and decimals

Multiplication and Division

Multiplication facts (up to 12x12)

Division facts

Inverse

Measurement

Convert

Statistics

Continuous Data

Line Graph

Problem Solving

Geometry – Position and Direction

Coordinates

Translation

Quadrant

X-axis

Y-axis

Perimeter and area

Long Term Plan—Skills Progression

Maths (Year 4)

Academic Year 2022/2023

Number: Place Value	**Year 3:** Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three digit multiples of 10. Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning Reason about the location of any three digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	**Year 5:** Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning. Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.
Number: Addition and Subtraction	**Year 3:** Secure fluency in addition and subtraction facts that bridge 10, through continued practice Calculate complements to 100. Add and subtract up to three-digit numbers using columnar methods. Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.	Year 5: 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	Year 3: 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	Year 5: Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context
Decimals	Year 3: Begins in Year 4.	Year 5: read and write decimal numbers as fractions [for example, 0.71 = 100 71] 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 read, write, order and compare numbers with up to three decimal places solve problems involving number up to three decimal places
Money	Year 3: add and subtract amounts of money to give change, using both £ and p in practical contexts	Year 5: use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Long Term Plan—Skills Progression

Maths (Year 4)

Academic Year 2022/2023

Measurement: Area, Length & Perimeter	Year 3: measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes	Year 5: convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 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 use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.
Geometry: Shape, Position/ Direction	Year 3: Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. Draw polygons by joining marked points, and identify parallel and perpendicular sides.	Year 5: 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. 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 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.
Number: Fractions	Year 3: Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts Find unit fractions of quantities using known division facts (multiplication tables fluency), reason about the location of any fraction within 1 in the linear number system, add and subtract fractions with the same denominator, within 1.	Year 5: Find non-unit fractions of quantities. Find equivalent fractions and understand that they have the same value and the same position in the linear number system. Recall decimal fraction equivalents for 1/2, 1/4, 1/5 and 1/10 and for multiples of these proper fractions.
Measurement: Time	Year 3: 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].	Year 5: solve problems involving converting between units of time.
Statistics	Year 3: interpret and present data using bar charts, pictograms and table to 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	Year 5: 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

Long Term Plan

Maths (Year 5)

Academic Year 2022/2023

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	**Number: Place Value** Read, write, order and compare numbers to at least 1000000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1000000. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000 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: Decimals** Read, write, order and compare numbers with up to 3dp. 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. **Number: Addition and Subtraction** Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits, including using formal written methods (column)			**Number: Addition and Subtraction** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. **Number: Multiplication and Division & Area** Multiply/divide numbers mentally, draw upon known facts. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. 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, 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 *Measure and calculate the perimeter of composite rectilinear shapes in cm and m.*		
Spring Term	**Number: Multiplication and Division & Area** 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 2 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. Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.			**Number: Fractions** 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 Add and subtract fractions with the same denominator and denominators that are multiples of the same number.			**Number: Fractions with Percentages** Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. Read and write decimal numbers as fractions Solve problems involving multiplication and division, including scaling by simple fractions. 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 and those fractions with a denominator of a multiple of 10 or 25. **Geometry: Angles** 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. 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) multiple of 90o		
Summer Term	**Statistics and Time** Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables including timetables. Solve problems involving converting between units of time. **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.						**Geometry: 3d Shapes & Measure: Volume** Identify 3D shapes, including cubes and other cuboids, from 2D representations. Estimate volume (for example using 1cm3 blocks to build cuboids (including cubes)) and capacity (for example, using water) Use all four operations to solve problems involving measure. *<u>To slot in (Measure: converting units)</u> -Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml) -Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. **Party Planning, Consolidation and Learning Challenges**					

Long Term Plan—Vocabulary

Maths (Year 5)

Academic Year 2022/2023

Number and Place Value Powers of 10	**Shape** Regular and irregular Polygons	**Number – Addition and Subtraction** Efficient written method	**Fractions, Percentages & Decimals** Proper fractions, improper fractions, mixed numbers Percentage Ratio, proportion
Multiplication and Division Factor pairs Composite numbers, prime number, prime factors, square number, cubed number Formal written method Derive	**Measurement** Volume Imperial units, metric units	**Statistics** Continuous Data Line Graph	
Problem Solving		**Geometry – Position and Direction** Reflex angle Dimensions	

Long Term Plan

Maths (Year 6)

Academic Year 2022/2023

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	**Number: Place Value and Decimals** 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. Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places. Multiply one-digit numbers with up to 2 decimal places by whole numbers.			Use written division methods in cases where the answer has up to 2 decimal places. Solve problems which require answers to be rounded to specified degrees of accuracy. **Number: Addition and Subtraction** Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition & subtraction Perform mental calculations, including with mixed operations and large numbers.			**Number: Multiplication and Division** Multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication. Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the context. Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context. Identify common factors, common multiples and prime no.s Use their knowledge of the order of operations to carry out calculations involving the four operations. (BIDMAS)			Use estimation to check answers to calculations and determine in the context of a problem, with 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 Generate and describe linear number sequences (with 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. Divide proper fractions by whole numbers.	
Spring Term	**Number: Percentages** Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. Associate a fraction with division and calculate decimal fraction equivalents. 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 contexts. **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. **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.			**Measurement: Converting Units, Perimeter, Area 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 cm3, m3) Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	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 kilometres. **Geometry: Properties of Shape** Draw 2-D shapes using given dimensions and angles.	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** 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.	
Summer Term	**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 the mean as an average. Investigations						Investigations and consolidating of units					

Long Term Plan—Vocabulary

Maths (Year 6)

Academic Year 2022/2023

Number and Place Value Numbers to ten million	**Shape** Vertically opposite (angles) Circumference, radius, diameter	**Number – Addition and Subtraction** Order of operations BIDMAS (Brackets, Indices, Division, Multiplication, Addition, Subtraction)	**Fractions, Percentages & Decimals** Degree of accuracy Simplify
Multiplication and Division Order of operations BIDMAS (Brackets, Indices, Division, Multiplication, Addition, Subtraction) Common factors, common multiples	**Measurement**	**Statistics** Mean Pie chart Construct	
Problem Solving	**Algebra** Linear number sequence Substitute Variables Symbol Known values	**Geometry – Position and Direction** Four quadrants (for co-ordinates)	

Long Term Plan—Skills Progression

Maths (Year 6)

Academic Year 2022/2023

Number: Place Value	**Year 5:** Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with	up to 2 decimal places using standard and nonstandard partitioning. Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/ number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.	**Year 7:**
Number: Addition and Subtraction	**Year 5:** 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.	Year 7:
Number: Multiplication and Division	Year 5: Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.	Multiply any whole number with up to 4 digits by any one -digit number using a formal written method. Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context	Year 7:
Measurement: Length and Height	Year 5:		Year 7:

Long Term Plan—Skills Progression

Maths (Year 6)

Academic Year 2022/2023

Measurement: Area, Perimeter & Converting Units	Year 5: convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 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 use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	Year 7:
Geometry: Shape, Position/ Direction	Year 5: 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. 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 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.	Year 7:
Number: Fractions	Year 5: Find non-unit fractions of quantities. Find equivalent fractions and understand that they have the same value and the same position in the linear number system. Recall decimal fraction equivalents for 1/2, 1/4, 1/5 and 1/10 and for multiples of these proper fractions.		Year 7:
Decimals	Year 5: read and write decimal numbers as fractions [for example, 0.71 = 100 71] 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 read, write, order and compare numbers with up to three decimal places solve problems involving number up to three decimal places	Year 7:
Statistics	Year 5: 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 7:

Long Term Plan

Maths (Year 1)

Academic Year 2022/2023

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Number: Place Value (Within 10) 1– Sort objects 2– Count Objects 3– Count objects from a larger group 4– Represent objects 5– Recognise numbers as words 6– Count on from any number 7– 1 more 8– Count backwards within 10 9– 1 less			10– Compare groups by matching 11– Fewer, more, same 12– Less than, greater than, equal to 13– Compare numbers 14– Order objects and numbers 15– The number line		Number: Addition and Subtraction (Within 10) 1– Introduce parts and wholes 2– Part-whole model 3– Write number sentences 4– Fact families—addition facts 5– Number bonds within 10 6– Systematic number bonds within 10 7– Number bonds to 10 8– Addition—add together			9– Addition—add more 10– Addition problems 11– Find a part 12– Subtraction—find a part 13– Fact families—the eight facts 14– Subtraction—take away/cross out 15– Take away (How many left?) 16—Subtraction on a number line 17– Add or subtract 1 or 2		Geometry: Shape 1– Recognise and name 3d shapes 2– Sort 3d shapes 3– Recognise and name 2d shapes 4– Sort 2d shapes 5-Patterns with 2d and 3d shapes	
Spring Term	Number: Place Value (Within 20) 1– Count within 20 2– Understand 10 3– Understand 11,12 and 13 4– Understand 14,15 and 16 5– Understand 17,18 and 19 6– Understand 20 7– 1 more and 1 less 8– The number line to 20	9– Use a number line to 20 10– Estimate on a number line to 20 11– Compare numbers to 20 12– Order numbers to 20		Addition and Subtraction (Within 20) 1– Add by counting on within 20 2– Add ones using number bonds 3– Find and make number bonds to 20 4– Doubles 5– Near doubles	6– Subtract ones using number bonds 7– Subtraction—counting back 8– Subtraction—finding the difference 9– Related facts 10– Missing number problems		Place Value (Within 50) 1– Count from 20 to 50 2– 20, 30, 40 and 50 3– Count by making groups of 10 4– Groups of tens	and ones 5– Partition into tens and ones 6– The number line to 50 7– Estimate on a number line to 50 8– 1 more, 1 less	Measurement: Length and Height 1– Compare lengths and heights 2– Measure length using objects 3– Measure length in centimetres		Measurement—Mass and Volume 1– Heavier and lighter 2– Measure mass 3– Compare mass 4– Full and empty	5– Compare volume 6– Measure capacity 7– Compare capacity
Summer Term	Number: Multiplication and Division 1–			Number: Fractions 1–		Geometry: Position and Direction 1–	Number: Place Value (Within 100) 1–		Measurement: Money 1–	Measurement: Time 1–		