Hunslet Moor Primary School – Curriculum LTP Map

Mathematics 2024- 2025 LTP & Objectives

Year	Autumn 1 Objectives	Autumn 2 Objectives	Spring 1 Objectives	Spring 2 Objectives	Summer 1 Objectives	Summer 2 Objectives
Nursery	**Maths** At Hunslet Moor we follow White Rose Maths in R-Y6 and use White Rose Maths resources to support our teaching in Nursery. In FS1 we ensure children understand the principle of 1:1 counting, the cardinal principle, show awareness of representing numbers in different ways and subitising etc. We meet shape and measure by ensuring children have a wide understanding and develop language skills to support play. Children will have the opportunity to explore and apply their mathematical learning when learning in provision areas indoors and outdoors and through interactions with practitioners.					
	I can sing a range of number songs and rhymes I can identify and name the different colours I can match things which are the same. I can sort objects by colour, shape and size. I am beginning to identify simple patterns (AB) e.g blue, red. I am beginning to name simple 2D shapes. I can make comparisons between objects - size, length, weight and capacity.		I can recite numbers up to 5 and beyond I can show finger numbers to 5. I can subitise amounts to 3. I can see 3 in different ways (through different manipulatives e.g 3 sticks, triangles, towers) and recognise it without counting. I can say one number name for each item. I can make comparisons between quantities.		I can count, order, recognise and use numbers to 5. I am beginning to match numerals to a quantity. I can subitise up to 3 objects I can compare quantities using the language of less, more, fewer and the same. I can begin to sequence daily routines. I can use some simple positional language e.g next to, under, on top. I can create simple AB patterns and extend them to ABC patterns. I can begin to order objects by size, length, weight and capacity.	
Reception	**Maths** At Hunslet Moor Primary School we follow White Rose Maths. However, children's needs are paramount to our teaching and tweaks will be made to ensure children's needs are being met if necessary. Children will be taught the concepts through carpet times and small group sessions and will complete one adult focus task per week. They will also have the opportunity to practise learnt skills in provision areas, inside and out. Adults will model the language of mathematical thinking and support children to explore their own mathematical thinking and interests.					
	Getting to Know You Settling in, developing understanding of classroom provision and routines. <u>Match, Sort and Compare</u> Match objects, match pictures. Sort objects to a type, explore sorting techniques, create sorting rules <u>Compare amounts</u> Talk about Measure and Patterns Compare size Compare mass Compare capacity <u>Explore simple patterns</u> Copy and continue simple patterns Create simple patterns	<u>It's Me 1 2 3!</u> Find 1, 2 and 3 Subitise 1, 2 and 3 Represent 1, 2 and 3 Find 1 more, 1 less Composition of 1, 2 and 3 <u>Circles and Triangles</u> Identify and name circles and triangles Compare circles and triangles Shapes in the environment Describe position <u>1,2,3,4,5</u>. Find 4 and 5 Subitise 4 and 5 Represent 4 and 5 1 more, 1 less Composition of 4 & 5 Composition of 1 – 5 <u>Shapes with 4 sides</u>. Identify and name shapes with 4 sides Combine shapes with 4 sides Shapes in the environment My day and night	<u>Alive in 5!</u> Introduce zero Find 0 to 5 Subitise 0 to 5 Represent 0 to 5 1 more and 1 less Composition of numbers to 5 Conceptual subitising to 5 <u>Mass and Capacity</u> Compare mass Find a balance Explore capacity Compare capacity <u>Growing 6, 7 & 8</u> Find 6, 7 and 8 Represent 6, 7 and 8 1 more and 1 less Composition of 6, 7 and 8 Make pairs-odd and even Double to 8 (find and make a double) Combine 2 groups	<u>Length, height and time.</u> Explore and compare length Explore and compare height Talk, order and sequence time <u>Building 9 and 10.</u> Find 9 and 10 Compare numbers to 10 Represent 9 and 10 Conceptual subitising to 10 1 more & 1 less Composition to 10 Bonds to 10 (2 & 3 parts) Make arrangements of 10 Doubles to 10 (find a double) <u>Explore 2D and 3-D Shapes</u>. 2D shapes, 3D shapes. Patterns	<u>To 20 and Beyond</u> Build numbers beyond 10 Spatial reasoning Match, Rotate, Manipulate <u>How many now?</u> Add more How many did I add? Take away How many did I take away? <u>Manipulate, compose and decompose.</u> Select shapes for a purpose Rotate shapes Manipulate shapes Explain shape arrangements Compose shapes Decompose shapes Copy 2-D shape pictures Find 2-D shapes within 3-D shapes	<u>Sharing and grouping</u> Explore sharing Explore grouping Even and odd sharing Play with and build doubles <u>Visualise, build and map</u>. Patterns Replicate and build scenes and constructions Visualise and describe from different positions Give instructions to build <u>Explore mapping</u> Represent maps with models Create own maps from familiar places <u>Make connections</u> Deepen understanding Patterns and relationships Consolidation.
Year 1	**<u>Place Value (within 10) (within 20)</u>** • Sort objects. • Count objects and represent objects. • Count, read and write forwards from any number 0 to 10, 0-20. • Count, read and write backwards from any number 0 to 10, 0-20. • Count one more, count one less. • One to one correspondence to start to compare groups. • Compare groups using language such as equal, more/greater, less/fewer • Introduce < > = symbols. • Compare numbers. • Order groups of objects. • Order numbers. • Ordinal numbers 1st, 2nd, 3rd.		**<u>Addition subtraction (within 20)</u>** • Add by counting on. • Find and make number bonds. • Add by making 10. • Subtraction - not crossing 10. • Subtraction - crossing 10. • Related facts. • Compare number sentences. <u>New Vocabulary-</u> One step problem, Concrete object, Pictorial representation, Missing number problem, Read, Write, Interpret Equals =, Signs, One-digit Two-digit, Ones, Mental, Mentally **Place Value (within 50)** • Numbers to 50.		**<u>Multiplication and Division</u>** • Count in 2s, 5s and 10s. • Make equal groups. • Add equal groups. • Make arrays. • Make doubles. • Make equal groups - groupings. • Make equal groups- sharing. <u>New Vocabulary</u>- Multiples, Twos, Fives, Tens, Number, Multiply, Divide, Multiplication, Division, One step Problem, Answer, Concrete object Pictorial representation, Arrays, Count, Equals, Write **<u>Fractions</u>** • Find a half.	

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The number line.
Tens and ones.

New Vocabulary- Forwards Backwards Numerals, Words
Multiples, Equal to, More than, Less than, Fewer, Most /Least, Identify, Represent, Digit, Calculate, Odd /Even Pattern, Numbers up to one hundred

<u>Addition and subtraction (within 10)</u>

Part-whole model.
Additional symbol.
Fact families- additional facts.
Find number bonds for numbers within 10.
Number bonds to 10.
Compare number bonds.
Addition - adding together, adding more.
Finding a part.
Subtraction - taking away, how many left? Crossing out, subtraction symbol, finding a part, the 8 facts, counting back.

New Vocabulary- One step problem, Concrete object, Pictorial representation, Missing number problem, Read, Write, Interpret
Equals =, Signs, One-digit Two-digit, Ones, Mental, Mentally

<u>Geometry - Shape</u>

Recognise and name 2D shapes, sort 2D shapes.
Recognise and name 3D shapes, not 3D shapes.
Patterns with 3D and 2D shapes.

New Vocabulary- 2-D Shapes, 3-D Shapes, Two Dimensional, Three Dimensional, Cuboid, Cube, Pyramid, Cone, Cylinder, Sphere
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Tens and ones.
Represent numbers to 50.
One more, one less.
Compare objects within 50.
Compare numbers within 50.
Order numbers within 50.
Count in 2s.
Count in 5s.

New Vocabulary- Forwards Backwards Numerals, Words
Multiples, Equal to, More than, Less than, Fewer, Most /Least, Identify, Represent, Digit, Calculate, Odd /Even Pattern, Numbers up to one hundred

Length and Height

Compare lengths and heights.
Measure length.

New Vocabulary- Length, Height, Long, Short, Longer, Shorter, Tall

<u>Weight and Volume</u>

Introduce weight and mass.
Measure mass.
Compare mass.
Introduce capacity and volume.
Measure capacity.
Compare capacity.

New Vocabulary- Double, Half, Mass, Heavy, Light, Heavier than, Lighter than, Volume, Full, Empty, More than, Less than, Half full
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Find a quarter.

New Vocabulary- Fraction Half Equal parts , One whole, Object, Shape Quantity , Quarter

<u>Position and direction</u>

Describe turns.
Describe position.

New Vocabulary- Half turn Quarter turn Three-quarter turn Left Right Up, Down

<u>Place value (within 100)</u>

Counting forwards and backwards within 100.
Partitioning numbers.
Comparing numbers.
Ordering numbers.
One more, one less.

New Vocabulary- Forwards Backwards Numerals, Words
Multiples, Equal to, More than, Less than, Fewer, Most /Least, Identify, Represent, Digit, Calculate, Odd /Even Pattern, Numbers up to one hundred

<u>Money</u>

Recognising coins
Counting coins

New Vocabulary- Coins, Notes,

<u>Time</u>

Before and after
Dates
Time to the hour, half hour
Writing time
Comparing time

New Vocabulary- Dates ,Days , Weeks , Months, Chronological order , Before/ After Next First , Today Yesterday Tomorrow Morning Afternoon Evening Record Hours, Minutes Hour Half past , O clock , Hands , Clock face Seconds, Quarter, Quicker, Slower, Earlier, Later
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<td>Year 2</td>
<td><u>Place Value</u>

Recap Counting forwards and backwards within 20
Recap Tens and ones within 20
Recap Counting forwards and backwards within 50 (Numbers to 50)
Recap Tens and ones within 50
Recap Compare numbers within 50
Count objects to 100 and read and write numbers in numerals and words
Represent numbers to 100
Tens and ones with a part-whole model
Tens and ones using addition
Use a place value chart
Compare objects
Compare numbers
Order objects and numbers
Count in 2s
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<td><u>Addition & subtraction</u>

Fact families - addition and subtraction bonds to 20
Check calculations
Compare number sentences
Know your bonds
Related facts
Bonds to 100 (tens)
Add and subtract 1s
10 more and 10 less
Add and subtract 10s
Recap Add by making 10
Add a 2-digit and 1-digit number - crossing ten
Recap Subtraction - crossing 10
Subtract a 1-digit number from a 2-digit number - crossing ten
Add two 2-digit numbers - not crossing ten - add ones and add tens
Add two 2-digit numbers - crossing ten - add ones and add tens
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<td><u>Multiplication & division</u>

Recognise equal groups
Make equal groups
Add equal groups
Multiplication sentences using the x symbol
Multiplication sentences from pictures
Use arrays
Recap Make doubles
2 times-table
5 times-table
10 times-table
Recap Make equal groups - sharing
Make equal groups - sharing
Recap Make equal groups - grouping
Make equal groups - grouping
Odd and even numbers
Divide by 5
Divide by 10

<u>Statistics</u></td>
<td><u>Properties of shape</u>

Recognise 2-D and 3-D shapes
Activity Make 2-D and 3-D shapes
Count sides on 2-D shapes
Count vertices on 2-D shapes
Draw 2-D shapes
Lines of symmetry
Lines of symmetry - draw the whole
Sort 2-D shapes
Make patterns with 2-D shapes
Count faces on 3-D shapes
Count edges on 3-D shapes
Count vertices on 3-D shapes
Sort 3-D shapes
Make patterns with 3-D shapes

<u>Fractions</u>

Make equal parts
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<td><u>Length & height</u>

Recap Compare lengths and heights
Recap Measure lengths (1)
Measure length (cm)
Measure length (m)
Compare lengths
Order lengths
Four operations with lengths
Problem solving with lengths

<u>Position & direction</u>

Describe position
Problem solving with position
Describe movement
Describing turns
Describing movement and turns
Making patterns with shapes

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<td><u>Time</u>

Telling time to the hour
O'clock and half past
Quarter past and quarter to
Telling time to 5 minutes
Hours and days
Find durations of time
Compare durations of time

<u>Mass, Capacity and Temperature</u>

Introduce weight and mass
Recap Measure mass
Compare mass
Measure mass in grams
Measure mass in kilograms
Recap Introduce capacity and volume
Recap Measure capacity
Compare volume
Millilitres
Litres
Four operations with mass
Four operations with volume
Activity Temperature
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	• Count in 5s • Count in 10s • Count in 3s	• Subtract a 2-digit number from a 2-digit number - not crossing ten • Subtract a 2-digit number from a 2-digit number - crossing ten - subtract ones and subtract tens • Recap Find and make number bonds • Bonds to 100 (tens and ones) **Money** • Recognising coins and notes • Count money - pence • Count money - pounds (notes and coins) • Count money - notes and coins • Select money • Make the same amount • Compare money • Find the total • Find the difference • Find change • Two-step problems	• Make tally charts • Make tally charts • Draw pictograms (1-1) • Interpret pictograms (1-1) • Draw pictograms (2, 5 and 10) • Interpret pictograms (2, 5 and 10) • Block diagrams	• Recognise a half • Find a half • Recognise a quarter • Find a quarter • Recognise a third • Find a third • Unit fractions • Non-unit fractions • Equivalence of a half and 2 quarters • Find three quarters • Count in fractions • Problem solving with fractions		• Temperature
Year 3	**Number and place Value (wk 1-3)** • 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 **Outcome: Number: addition and subtraction (wk 4-8)** • 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	**Number: addition and subtraction (wk 4- 8 continued)** **Objectives:** See Autumn 1 **Multiplication and division (wk 9-11)** • 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. **week 12: consolidation**	**Number – multiplication and division (wk 1-3)** • 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 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. **Measurement – money (week 4)** Add and subtract amounts of money to give change, using both £ and p in practical contexts. **Statistics (week 5 and 6)**	**Measurement – length and perimeter (wk 7-9)** • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). • Measure the perimeter of simple 2D shapes. **Outcomes Number – fractions (wk 10-11)** **Objectives:** 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. **Week 12: consolidation**	**Number – fractions (week 1-3)** • 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 [for example, 57 + 17 = 67] • Solve problems that involve all of the above. **Measurement – time (wk 4-6)** • 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	**Geometry – properties of shape (wk 7 -8)** • 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 **Measurement – mass and capacity (wk 9-11)** • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). **Week 12: consolidation**

	• 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.		• 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		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 4	**<u>Number: Place Value - 4 weeks</u>** • count in multiples of 6, 7, 9, 25 and 1,000 • find 1,000 more or less than a given number • count backwards through 0 to include negative numbers • recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) • order and compare numbers beyond 1,000 • identify, represent and estimate numbers using different representations • round any number to the nearest 10, 100 or 1,000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value **Number: Addition and Subtraction - 3 weeks** • 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 **<u>Number: Multiplication and Division</u> - 6 weeks** • recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 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 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects		**<u>Measurement: Length and Perimeter (2 weeks) and Area (1 week)</u>** • convert between different units of measure [for example, kilometre to metre; hour to minute] • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares **<u>Number: Fractions (4 weeks) and Decimals (5 weeks)</u>** • 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 100 and dividing tenths by 10 • 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 • recognise and write decimal equivalents of any number of tenths or hundreds • recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ • find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths • round decimals with 1 decimal place to the nearest whole number • compare numbers with the same number of decimal places up to 2 decimal places • solve simple measure and money problems involving fractions and decimals to 2 decimal places		**<u>Measurement: Money (2 weeks) and Time (2 weeks):</u>** • estimate, compare and calculate different measures, including money in pounds and pence • 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 **<u>Statistics - 1 week</u>** • 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 **<u>Geometry: Properties of Shape - 2 weeks</u>** • compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify acute and obtuse angles and compare and order angles up to 2 right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry **<u>Geometry: Position and Direction - 2 weeks</u>** • describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon	
Year 5	**<u>Place value</u>** (3 weeks) • read, write, order and compare numbers to at least 1 000 000 • Determine the value of each digit count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000		**<u>Multiplication and division</u>** (3 weeks) (refer to multiplication and division) **<u>Fractions</u>** (6 weeks) • Compare and order fractions whose denominators are all multiples of the same number • identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths		**<u>Consolidation</u>** (1 week) **<u>Decimals</u>** • Use known facts to add and subtract decimals within • Complements to 1 • Add and subtract decimals across 1 • Add decimals with the same number of decimal places • Subtract decimals with the same number of decimal places • Add decimals with different numbers of decimal places	

	• Solve number problems and practical problems that involve all of the above read Roman numerals to 1000 (M) and recognise years written in Roman numerals. **Addition and subtraction** (2 weeks) • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • subtract numbers mentally with increasingly large numbers use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. **Statistics** (2 weeks) • Solve comparison, sum and difference problems using information presented in a line graph complete, read and interpret information in tables, including timetables. **Multiplication and division** (3 weeks) • identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers establish whether a number up to 100 is prime and recall prime numbers up to 19 • multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally drawing upon known facts divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. **Perimeter and area** (2 weeks) • convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes • estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] • solve problems involving converting between units of time • use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	• recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 5 2 + 5 4 = 5 6 = 1 5 1] • add and subtract fractions with the same denominator and denominators that are multiples of the same number • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • read and write decimal numbers as fractions [for example, 0.71 = 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 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 2 1 , 4 1 , 5 1 , 5 2 , 5 4 and those fractions with a denominator of a multiple of 10 or 25. **Decimals and percentages** (2 weeks) • 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 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 2 1 , 4 1 , 5 1 , 5 2 , 5 4 and those fractions with a denominator of a multiple of 10 or 25. **Consolidation** (1 week)	• Subtract decimals with different numbers of decimal places • Efficient strategies for adding and subtracting decimals • Decimal sequences • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply and divide decimals – missing values **Properties of shape** (3 weeks) • identify 3-D shapes, including cubes and other cuboids, from 2-D representations • know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees (o) • identify: angles at a point and one whole turn (total 360o) angles at a point on a straight line and 2 1 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. **Position and direction** (2 weeks) • 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. **Converting units** (2 weeks) • Kilograms and kilometres • Millimetres and millilitres • Convert units of length • Convert between metric and imperial units • Convert units of time • Calculate with timetables **Volume** (1 week) • Cubic centimetres • Compare volume • Estimate volume • Estimate capacity

Year 6	**<u>Place value (2 weeks)</u>** ● Numbers to 10,000 ● Numbers to 100,000 ● Numbers to 1 million ● Numbers to ten million ● Compare and Order any number ● Round number to 10, 100 and 1000 ● Round any number ● Negative numbers **<u>Four operations (4 weeks)</u>** ● Add whole numbers with more than 4 digits. ● Subtract whole numbers with more than 4 digits ● Inverse operations ● Multi Step addition and subtraction problems ● Addition and subtraction Integers ● Multiply 4 digits by 1 digit ● Multiply 2 digits by 2 digits ● Multiply 3 digits by 2 digits ● Multiply 4 digits by 2 digits ● Divide 4 digits by 1 digit ● Divide with remainders ● Short division ● Division using factors ● Long division ● common factors/ factors ● Common multiples ● Prime numbers ● Squared and cubed numbers ● order of operations ● Mental calculations & estimations.	**<u>Fractions (4 weeks)</u>** ● Equivalent fractions ● Mixed fractions ● Improper fractions to mixed fractions ● mixed numbers to improper fractions ● compare and order fractions (including on a numberline) ● add and subtract fractions ● add and subtract mixed numbers ● multiply fractions by integers ● four rules with fractions ● fractions of an amount **Measurement- converting units (1 week)** ● metric measures ● convert metric measures ● calculate with metric measures ● miles and kilometres ● imperial measures	**<u>Ratio and scaling (2 weeks)</u>** ● Using ratio language ● ratio and fractions ● ratio symbol ● calculating ratio ● using scale factors ● calculating scale factors ● ratio and proportion problems. **<u>Algebra</u> (2 weeks)** ● Find a rule of Algebra- one step. ● Find a rule of Algebra- two step. ● forming expressions ● substitution ● formulae ● forming equations ● solve simple one and two step problems ● find pairs of values ● Enumerate possibilities **<u>Fractions, decimals and percentages (4 weeks)</u>** ● Decimals up to 2 decimal places ● to understand thousandths ● multiply by 10, 100 & 1000 ● divide by 10, 100 & 1000 ● multiply decimals by integers ● divide decimals by integers ● use division to solve problems ● decimals as fractions ● fractions to decimals ● Understand percentages ● fractions to percentages ● equivalent fractions, decimals and percentages ● order of FDP ● percentage of an amount ● percentages- missing values ●	**<u>Perimeter, area and volume (2 weeks)</u>** ● Perimeter of shapes ● perimeter and area ● area of a triangle ● area of a parallelogram ● Volume ● volume of a cuboid **<u>Statistics (2 weeks)</u>** ● Read and interpret line graphs ● draw line graphs ● use line graphs to solve problems ● circles ● read and interpret pie charts ● pie charts with percentages ● draw pie charts ● calculate the Mean **<u>Consolidation (1 week)</u>**	**<u>Properties of Shape</u> (3 weeks)** ● Measure with a protractor ● draw lines and angles accurately ● angles on a straight line ● angles around a point ● calculate angles ● vertically opposite angles ● angles in a triangle ● angles in special quadrilaterals ● angles in regular polygons ● draw shape accurately ● draw 3D nets of shapes **<u>Geometry- position and direction (1 week)</u>** ● The first quadrant ● four quadrants ● translations ● reflections	**<u>Consolidation & Themed Projects (6 weeks)</u>**