

## Nurture Inspire Achieve Maths Curriculum Overview 2022 – 23



At Holymead Primary School we want our pupils to achieve high quality outcomes, through a broad, balanced, inspiring (creative, fun and exciting) curriculum.

## Our focus is on:

- Keeping children safe
- · Good quality teaching focusing on skills and knowledge
- A well planned, coherent, varied and interesting curriculum
- · High quality outcomes



We have identified, using a range of data, 3 key factors that underpin and shape our School Curriculum.

- Promoting Pupils' Personal Responsibility
- Developing Pupils' Life Skills
- · Increasing Pupils' Cultural Capital

|        | EYFS Curriculum Overview  |  |  |                                     |   |  |                               |                                      |
|--------|---|--|--|-------------------------------------|---|--|-------------------------------|--------------------------------------|
|        | Daily<br>Maths  |  |  |                                     | Maths Topics                              |  |                               |                                      |
| Term I | Focus on<br>numbers<br>I-5  |  | Baseline   |                                     | Counting objects using 1:1 correspondence | Comparing size                               | Sorting and comparing amounts | Repeating<br>patterns                |
| Term 2 | Number<br>bonds to<br>5   | Ways to make<br>five (using<br>Numicon and<br>objects) | Measure -<br>Capacity                            | Adding one<br>more                  | Circles and<br>triangles                  | Positional<br>Language                       | 2D shapes -<br>quadrilaterals | Measure –<br>Time (Day and<br>Night) |
| Term 3 | Focus on<br>numbers<br>5-10<br>Embedding<br>knowledge<br>of<br>numbers<br>1-10  | Introducing zero                                       | Weight   | Measure –<br>Height                 | Addition                                  | Measure –<br>Length                          | 3D shapes                     | Patterns                             |
| Term 4 | Number<br>bonds to<br>10  | Subtraction  | Measure –<br>Time (measuring<br>lengths of time) | Doubling                            | Counting on using a number line           | Data Collection<br>including Tally<br>Charts | Counting on using objects     | Estimating                           |
| Term 5 | Focus on<br>numbers<br>11-15  | Ordinal numbers  | Measure –<br>Weight                              | Sharing                             | Halving                                   | Place value                                  |                               |                                      |
| Term 6 | Focus on<br>numbers<br>15-20<br>Embedding<br>knowledge<br>of<br>numbers<br>1-20 | Money  | Match rotate                                     | reasoning<br>and manipulate<br>apes | Counting patterns                         |  | Odd and Even                  | Spacial<br>reasoning<br>mapping      |

|        | Year   Curriculum Overview  |   |  |   |            |  |  |
|--------|---|---|--|---|------------|--|--|
|        | Arithmetic Focus (Consolidation)  |   | Maths Topics   |   | Assessment |  |  |
| Term I | Number Formation Number bonds within 5 (part part wholes) Counting backwards and forwards to and from 10 Place value up to 10 (one more/ one less)  | Place Value within 10 - sort and count objects - ordering numbers - represent numbers up to 10 - counting forward and backwards to and from 10 - one more, one less up to 10 - comparing numbers (< > =) - using cardinal language (first, second etc.) - introducing number lines                  | Addition and Subtraction within 10  - part part wholes and bar models to show addition  - introducing the '+'  - using a range of apparatus to calculate number bonds to and within 10 beginning to draw out calculations  - systematic methods to find number bonds to 10  - '-' symbols  - addition and subtraction fact families within 10  - addition as adding more – counting on using apparatus  - adding 'O'  - comparing number sentences e.g. a + b < c, a + b > c + d |   | -          |  |  |
| Term 2 | Number Formation Number bonds within 10 (part part wholes, addition and subtraction) Adding three single digit numbers Counting forwards and backwards to and from 20 Place value within 20 (including comparing numbers using <>= and one more/one less) | Subtraction - part part wholes and bar models to show subtraction - subtraction as counting backwards (including using a number line) - subtraction as crossing out (drawing counters) and as difference using Numicon - subtracting 'O' - comparing number sentences e.g. a - b < c, a - b > c - d | Geometry - name and recognise 2D and 3D shapes - sorting 2D according to their properties - repeating patterns with 2D and 3D shapes   | Place Value within 20 - write numbers in words and numerals (up to 20) - representations of numbers II to 20 - one more, one less - compare (using language) and order numbers up to 20                           | Assessment |  |  |
| Term 3 | FORMAL ARITHMETIC BEGINS  Number bonds within 10 (part part wholes, addition and subtraction)  Adding three single digit numbers  Counting forwards and backwards to and from 50  Counting in 10s  Place value within 20                                  | Addition and Subtraction within 20 - add by counting on including using number lines - using number bonds within 10 to recognise patterns (e.g. 2 + 7,  |  | Place Value within 50 - counting in 10s to 50 using dienes - counting forwards and backwards within 50 - one more, one less within 50 - compare objects and numbers within 50 using <>= - represent numbers to 50 | -          |  |  |

|        | (comparing using < > =, one<br>more/one less)  |   |   |  |            |
|--------|--|---|---|--|------------|
| Term 4 | Number Bonds within 20 (part part wholes, addition and subtraction) Adding three single digit numbers Counting in 10s and 2s Place Value within 50 (comparing using < > =, one more/one less)  | Place Value within 50 - counting forward and backwards in 10s - counting forwards and backwards 2s - identifying odd and even numbers linked to counting in 2s - counting forward and backwards in 5s (reinforcing understanding with resources e.g. dienes, Numicon) | Length & Height  - comparing lengths and heights using language (long/short, longer/shorter, tall/short, double/half)  - measuring lengths and heights using non-standard units, then a ruler  - reasoning problems using lengths   | Weight & Mass  - measure mass using balance scales  - compare mass using language (heavy/light, heavier than, lighter than)  Capacity & Volume  - measure using non-standard measure  - compare volume using language (full/empty, more than, less than, half, half full, quarter) | Assessment |
| Term 5 | Number Bonds within 20 (addition, subtraction and missing number problems) Adding three single digit numbers Counting in 2s, 5s and 10s Place Value within 50 (one more and one less) Drawing equal groups (including arrays) and sharing Doubling and halving | Multiplication & Division  - making equal groups practically  - counting items in groups of 2,  | Fractions - recognising equal parts - identifying a whole and a half of shapes - find half of an item by cutting the image in half - finding half of a quantity (up to 20) by practically sharing out - begin to recall half of all even numbers up to 20 - recognise the link between halving, doubling, even numbers and counting in 2s - identify a quarter of a shape by cutting into 4 equal parts - find a quarter of a quantity by practically sharing out | Geometry - Position & Direction - describe turns (quarter, half, three-quarter, whole turn) - describing position (using language above, below, left, right)   | -          |

| Term 6 | Number Bonds within 20 (addition, subtraction and missing number questions) Counting in 2s, 5s and 10s Doubling and halving Place Value within 100 (including one more and one less) | Place Value within 100 - counting in 10s to 100 (using dienes) - counting forwards and backwards within 100 using 100 squares - partitioning numbers into tens and ones (using dienes) - compare (< > =) and order numbers up to 100 - one more, one less | Money - recognise and name coins - counting coins in Is, 2s, 5s | Time - before and after - days and dates - o'clock and half past - recognising the length a second, a minute and an hour - comparing lengths of time using language (quicker, slower, earlier, later) | Assessment |
|--------|--|---|---|---|------------|
|--------|--|---|---|---|------------|

|        | Year 2 Curriculum Overview   |  |   |   |            |  |  |
|--------|--|--|---|---|------------|--|--|
|        | Arithmetic Focus   |  | Maths Topics  |   | Assessment |  |  |
|        |  | Place Value  | Number Bonds  | Addition & Subtraction  |            |  |  |
|        |  | - recognising the value of each digit in a two-digit number              | - representations of number<br>bonds (e.g. part part wholes,<br>tens frame) within 10 including | - addition and subtraction shown through part part wholes                               |            |  |  |
|        |  | - represent numbers to 100 including on number lines                     | fact families - representations of number   | - adding and subtracting<br>multiples of 10 (dienes/Numicon<br>and 100 squares) *       |            |  |  |
|        | I more, I less<br>Greater than & less than                             | - read & write numbers to 100 in numerals and words                      | bonds (e.g. part part wholes,<br>tens frame) within 20 including<br>fact families               | - adding and subtracting ones using resources* and known                                |            |  |  |
| Term I | Counting in 2s, 5s and 10s<br>10 times table<br>Number Bonds within 20 | - partition numbers to 100 in<br>different ways                          | - adding three single digit<br>numbers by looking for doubles                                   | facts (35-3, 5-3=2 so 35-3=32) - adding and subtracting two                             | -          |  |  |
|        |  | - compare using < > = and order numbers to 100                           | and number bonds<br>- adding single digits which  | digit numbers without bridging (partitioning numbers into tens and ones using dienes) * |            |  |  |
|        |  | - count (forwards & backwards) in 2s, 5s & 10s                           | bridge 10 using tens frames  - subtracting a single digit from a teen number bridging           | *All done practically before moving on to drawing out calculations                      |            |  |  |
|        |  | - 10 times table   | 10 using tens frames  | 33.34.4.16.16   |            |  |  |
|        |  | Addition & Subtraction   | Measure – Money   | Multiplication  |            |  |  |
|        | Counting in 2s, 5s and 10s   | - adding two digit to two digit<br>numbers bridging 10 using<br>dienes * | - naming coins and notes - counting money including   | - counting in 2s, 5s and 10s to solve problems  |            |  |  |
| Term 2 | 10 and 2 times table Number bonds within 20 Addition and Subtraction   | - subtracting two digit from two digit bridging 10 using                 | coins and notes (drawing out dienes/Numicon)  | - recognising and making equal groups using resources                                   | Assessment |  |  |
|        | (multiples of 10)  | multi-link cubes *   | - making the same total in<br>different ways  | - adding equal groups (repeated addition)   |            |  |  |
|        |  | - finding number bonds to 100<br>linking to number bonds*                | - finding the difference  | - multiplication as groups  |            |  |  |

|        |  | All done practically before<br>moving on to drawing out<br>calculations*  | between amounts using number<br>lines - finding change  | <ul> <li>multiplication as arrays</li> <li>multiplying by 0</li> <li>odd and even numbers</li> <li>2 x table linked to doubling and even numbers</li> </ul> |            |
|--------|--|---|---|---|------------|
| Term 3 | Counting in 2s, 5s and 10s<br>2, 5 and 10 times table<br>Number bonds within 20<br>Addition and Subtraction<br>(multiples of 10, single digit to<br>two digits)      | Multiplication & Division  - division by grouping (drawing groups, counting in 2s, 5s and 10s, and on a number line)  - division using arrays  - dividing by 10 and 2  relating to 2 times table  - 5 x table  - number fact families with 2, 5 and 10 times table  - counting in groups of 3 | Number Bonds & Bridging  - number bonds to 10, 20 & 100  - adding TO + O & TO + TO, bridging ten  - subtracting TO - O & TO - TO, bridging ten  | Fractions  - recognise the equal parts - find and identify fractions of shapes  - find half ½ of a shape is the same as <sup>2</sup> / <sub>4</sub>         | -          |
| Term 4 | 2, 5 and 10 times table Number bonds within 20 Fractions of amounts Addition and Subtraction (multiples of 10, single digit to two digits, two digits to two digits) | Fractions  - finding a half of numbers by sharing out and linking this to dividing by 2 (including multiples of 10) or number  - finding unit and non-unit fractions of numbers by sharing practically with   | Statistics  - construct and interpret pictograms, tally charts, block charts and simple tables  - answer simple questions by counting objects in a category  - comparing categorical data | Shape  - name and describe 2D (including lines of symmetry) and 3D shapes  - order shapes in patterns   | Assessment |

|        |  | counters then drawing out - counting in fractions on a number line   | - difference using Numicon/<br>towers of cubes (How many<br>more? How many less?) |  |                       |
|--------|--|--|---|--|-----------------------|
| Term 5 | 2, 5 and 10 times table Number bonds within 100 Fractions of amounts Addition and Subtraction (multiples of 10, single digit to two digits, two digits to two digits) Counting in 3s | Measure - Time  - compare and sequence intervals of time  - telling the time to 15 minutes (GDS - 5 minutes)  - recall time facts e.g. number of seconds in a minute, number of minutes in an hour | Revision  | Measure  - read scales to measure length/height, mass, capacity and temperature  - identify the correct unit of measure for length/height, mass, capacity, temperature  - order and compare measures using < > = | Assessment - KSI SATs |
| Term 6 | 2, 5 and 10 times table Number bonds within 100 Fractions of amounts Addition and Subtraction (multiples of 10, single digit to two digits, two digits to two digits) Counting in 3s | Multiplication, Division and Fractions Recap  - recap multiplication and division (2, 5, and 10x table)  - counting in 3s  - calculating fractions of amounts                                      | Shape - compare and sort 2D and 3D shapes according to their properties           | Position and Direction  - describe position and directions including clockwise and anticlockwise turns (quarter, half, three quarter and full) using the language of right angle                                 | -                     |

|        | Year 3 Curriculum Overview                        |  |  |   |   |  |  |
|--------|---|--|--|---|---|--|--|
|        | Arithmetic Focus                                  |  | Maths Topics   |   | Assessment  |  |  |
| Term I | Recap of 2, 5 and 10x tables  3 times table focus | Place Value  - recap 2, 5 and 10x table  - Represent, identify and estimate numbers up to 3 digits  - Recognise the place value of 3 digit numbers  - Count in multiples of 100  - Read and write numbers up 3 digits in numerals and words  - Compare and order numbers with 3 digits  - Find 10 and 100 more or less than a given number  - identify, represent and estimate 3 digit numbers using different representations | Mental Addition and Subtraction  - Recall all number bonds within 100 including addition and subtraction to create fact families  - add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds  - Use of representations, resources and jottings to embed mental strategies | Multiplication and Division  - Recall the 3x table including multiplying and dividing by 3  - Recall doubles and halves up to double 10  - Representing multiplication and division as equal groups  - Representing multiplication and division as arrays  - Use repeated addition for multiplication and division  - Recall fact families for 2, 5, 10 and 3x tables | Termly Arithmetic Test Year 2 (testbase)                |  |  |
| Term 2 | 4x table<br>Number bonds to 100                   | Addition Using Representations  - Partition numbers to add two and three digit numbers together by drawing hundreds, tens and ones. Moving on to   | Subtraction using representations  - Partition numbers to subtract two and three digit numbers together by drawing hundreds, tens and ones. Moving on to   | Money  - Learning 4x table as doubling of the 2x table  - Recall the 4x table including multiplying and dividing by 4   | NFER Assessment<br>Termly Arithmetic Test<br>(testbase) |  |  |

|        |   | partitioning by adding mentally.  - Column addition using concrete and pictorial)  No exchanging  Exchanging once  Exchanging twice.  .   | partitioning by subtracting mentally.  - Column subtraction using concrete and pictorial)  No exchanging  Exchanging once  Exchanging twice.  | <ul> <li>Become fluent recognising the value of coins</li> <li>Make different amounts of money with various coins.</li> <li>Add and subtract amounts of money including £ and p (decimal in money is introduced in Y4)</li> </ul>   |   |
|--------|---|---|---|---|---|
| Term 3 | 8x table                                | Formal Column Addition  - 2 digit add 2 digit No exchanging Exchanging once Exchanging twice.  - 3 digit add 3 digit No exchanging Exchanging once Exchanging twice.  - 3 digit add 2 digit No exchanging Exchanging twice. | Formal Column Subtraction  - 2 digit subtract 2 digit     No exchanging     Exchanging once     Exchanging twice.  - 3 digit subtract 3 digit     No exchanging     Exchanging once     Exchanging twice.  - 3 digit subtract 2 digit     No exchanging     Exchanging twice. | Multiplication  - Learning the 8 x table as doubling the 4x table  - recall the 8x table including multiplying and dividing by 8  - Multiplying by 10 and 100  - Related multiplication and division facts (e.g. 20 x 5)  (YEAR 4?)  - introduce recorded partitioning of numbers to multiply two-digit and one digit numbers | Termly Arithmetic Test<br>(testbase)                    |
| Term 4 | Consolidate 2, 3, 4, 5, 8 and 10x table |   | Time  - Know the number of seconds in a minute and the number of days in each month, year and leap year  - Estimate and read time with increasing accuracy to the   |   | NFER Assessment<br>Termly Arithmetic Test<br>(testbase) |

|        |  | - Recognise fractions as part   | nearest minute  |   |                                      |
|--------|--|---|---|---|--------------------------------------|
|        |  | of a whole in numbers,<br>measurement, shape and unit   | - Tell and write the time from  |   |                                      |
|        |  | fractions of a quantity   | an analogue clock including<br>using Roman Numerals (I to                                     |   |                                      |
|        |  | - Recognise, show and use<br>diagrams to show equivalent  | XII) and 24 hour clocks   |   |                                      |
|        |  | fractions   | - Use vocabulary such as  |   |                                      |
|        |  | <ul> <li>Count up and down in tenths</li> <li>Compare and order fractions</li> <li>with the same denominator</li> </ul>   | o'clock, a.m./p.m., morning,<br>afternoon, noon and midnight                                  |   |                                      |
|        |  | including on a number line<br>- Add and subtract fractions  | - Record and compare time in terms of seconds, minutes and                                    |   |                                      |
|        |  | with the same denominator<br>within l   | hours   |   |                                      |
|        |  | - Compare and order unit fractions including on a number  | - Compare durations of events [for example to calculate the                                   |   |                                      |
|        |  | line  | time taken by particular events or tasks].  |   |                                      |
|        |  | Multiplication  |   |   |                                      |
|        |  | - Learn the IIx table through   | Division  | Statistics  |                                      |
|        |  | partitioning  |   |   |                                      |
|        |  | - recap using partitioning to<br>calculate mathematical<br>statements for multiplication  | - rapid recall of division facts<br>for 2, 3, 4, 5, 8, 10 and 11x<br>table                    | - Interpret and present data using bar charts, pictograms and tables in a range of contexts   |                                      |
| Term 5 | Continue to consolidate 2, 3, 4, 5, 8, and 10 times tables | - recap using partitioning to calculate mathematical  | for 2, 3, 4, 5, 8, 10 and 11x   | using bar charts, pictograms<br>and tables in a range of                                      | Termly Arithmetic Test<br>(testbase) |
| Term 5 | 8, and 10 times tables                                     | - recap using partitioning to<br>calculate mathematical<br>statements for multiplication<br>and division using 2, 3, 4, 5, 8,<br>10 and 11x table for two-digit | for 2, 3, 4, 5, 8, 10 and 11x table  - using known multiplication fact use long division with | using bar charts, pictograms and tables in a range of contexts - Understand scales (intervals | ,                                    |

|        | - answer missing number<br>problems and scaling and<br>correspondence problems in<br>which n objects are connected<br>to m objects   |  |   |   |
|--------|--|--|---|---|
| Term 6 | Properties of Shape  - Recall the names and properties of common 2D and 3D shapes (using the language from KSI – sides, vertices, edges, faces)  - Draw 2D shapes and make 3D shapes using modelling materials  - Identifying shapes as symmetrical or non-symmetrical polygons (2D shapes) and polyhedral (3D shapes)  - Recognise horizontal, vertical, parallel and perpendicular lines  - To name and recognise a right angle as 90°  - Use angles to describe a turn. Recognising that two right angles make a half-turn, three make three quarters of a turn and four a complete turn  - Recognise angles greater than | Length and perimeter  - Drawing accurate lines using m, cm and mm  - Measuring lengths in m, cm and mm  - Compare and order lengths in m, cm and mm  - Add and subtract lengths in m, cm and mm  - Measuring the perimeter of simple 2D shapes | Mass and Capacity  - Measuring the mass of items in kg and g  - Compare and order mass in kg and g  - Add and subtract mass in kg and g  - Measuring the capacity of items in I and mI  - Compare and order capacity in I and mI  - Add and subtract capacity in I and mI | NFER Assessment<br>Termly Arithmetic Test<br>(testbase) |
|        | and less than 90° (obtuse and  |  |   |   |

| acute)   |  |  |
|--|--|--|
| - Recognise angles as a<br>property of a 2D shape  |  |  |
| <ul> <li>Recognise and describe 2d</li> <li>shapes in different orientations</li> <li>Recognise and describe 3d</li> <li>shapes in different orientations</li> </ul> |  |  |
| - Symmetrical and non-<br>symmetrical polygons   |  |  |

| Year 4 Curriculum Overview |   |  |  |  |  |  |
|----------------------------|---|--|--|--|--|--|
|                            | Arithmetic Focus                                |  | Maths Topics   |  |  |  |
| Term I                     | Recall 2, 3, 4, 5, 8, 10, 11x times table facts | Place Value Recognise and represent numbers up to 4 digits using Read and write 4 digit numbers  Compare and order numbers including 4 digits  Round numbers Find 1000 more or less than a given number  Negative Numbers  Roman Numerals to 100 | Mental Strategies for Addition and Subtraction  Use of place value to add and subtract mentally  Partitioning to add and subtract mentally  Use of a number line to add and subtract numbers to multiples of one thousand. | Multiplication and Division  Representing multiplication and division as equal groups  Representing multiplication and division as arrays  Use repeated addition for multiplication and division  Recall fact families  Multiplying and dividing by 10 and 100  Related multiplication and division facts (eg. 20 x 5) | Termly Arithmetic Test<br>(testbase)               |  |
| Term 2                     |   | Formal Methods for addition and subtraction  Column method for addition up to 4 digits  Column method for subtraction up to 4 digits  Use of inverse calculations to check answers   | Multiplication  Factor pairs  Partitioning for multiplication  Formal multiplication by a single digit (2x1 and 3x1)  Multiplying 3 numbers together   | Division Long division  Division with interpreting remainders to suit the question   | Assessment<br>Termly Arithmetic Test<br>(testbase) |  |
| Term 3                     |   | Money<br>Recognise and write monetary<br>values  | Decimals Representing, reading and   | Calculating with decimals Adding and subtracting with decimal numbers  Use of a number line to find  | Termly Arithmetic Test<br>(testbase)               |  |

|        |   | writing decimal numbers up to 2dp (distinguishing between how to read money and how to read decimal numbers)  Comparing and ordering decimals (same number of dp)  Rounding Decimals to the nearest whole number | change (e.g. From £20)  Multiplication and division facts with decimal numbers  Dividing with decimal numbers Remainders as decimals  |  |
|--------|---|--|---|--|
| Term 4 | Fractions<br>Recognise and show families of<br>equivalent fractions   | Fractions and Decimals   | Division  Revisit long division  Short division  Division with rounding remainders to suit the question   | Assessment<br>Termly Arithmetic Test<br>(testbase) |
| Term 5 | Time Read, write and convert time between analogue and digital 12- and 24-hour clocks  Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. | Converting units of measure<br>Convert between different<br>units of measure [for example,<br>kilometre to metre; grams to<br>kilograms]   | Properties of shape Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes  Identify acute and obtuse angles and compare and order angles up to two right angles by size  Identify lines of symmetry in 2-D shapes presented in different orientations  Complete a simple symmetric figure with respect to a specific line of symmetry. | Termly Arithmetic Test<br>(testbase)               |

| Term 6 | Area and Perimeter measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares | Position and Direction Describe positions on a 2-D grid as coordinates in the first quadrant  Describe movements between positions as translations of a given unit to the left/right and up/down  Plot specified points and draw sides to complete a given polygon  Draw axes of one quarant | 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 | Assessment<br>Termly Arithmetic Test<br>(testbase) |
|--------|--|--|--|--|
|        |  | Draw axes or one quarant   | 1  |  |

|        | Уеаг 5 Curriculum Overview |  |   |  |  |  |
|--------|----------------------------|--|---|--|--|--|
|        | Arithmetic Focus           | Maths Topics   |   |  | Assessment   |  |
| Term I |                            | Place Value - Read and write numbers to I million - Compare and order numbers to I million - Rounding number up to I million - Negative Numbers - Roman Numerals to 1000 (M)   | Mental Strategies for addition and subtraction - Mental strategies - Use of the inverse - Missing numbers - Counting forwards and back in powers of 10  | Formal Strategies for addition and Subtraction  - Column method for addition whole numbers with more than 4 digits  - Column method for subtraction whole numbers with more than 4 digits  - Use of estimation to check calculations             | Termly Arithmetic Test<br>(testbase)               |  |
| Term 2 |                            | Multiplication and Division Related multiplication and division facts Square, cubed numbers Factors pair and common factors Multiples Prime Numbers and composite numbers Multiplying and dividing by 10, 100 and 1000 | Multiplication  Partitioning for multiplication  Formal multiplication for a 4  digit by a single digit  Formal Multiplication of 4 digit  by 2 digit   | Division Long division by a single digit Short division by a single digit Division with rounding remainders to suit the question (Division with remainders to be taught later in the year) Long division by a 2 digit number (where appropriate) | Assessment<br>Termly Arithmetic Test<br>(testbase) |  |
| Term 3 |                            | Decimals Recognise the place value of decimals to 3 decimal places Compare and order fractions up to 3dp Rounding Decimal to Idp and the nearest whole number  | Calculating with decimals Recall complements to I Add and subtract decimal numbers including a different number of decimal places Multiplication and division facts with decimal numbers Dividing with decimal numbers Remainders as decimals | Fractions Compare and order fractions Identify equivalent fractions Convert between mixed and improper fractions   | Termly Arithmetic Test<br>(testbase)               |  |

| Term 4 | Calculating with fractions Add and subtract fractions with the same denominator Add and subtract fractions with the denominators that are multiples of the same number Multiply proper fractions and mixed number fractions by a whole number  | Fractions Decimals and Percentages Read and write decimal numbers as fractions Recognise the per cent symbol to relate to out of 100 Write percentages as a fraction with a denominator of 100 Write percentages as a decimal | Calculating percentages Use strategies for finding 10%, 50% and 25% Find Multiples of 10% Find 5% of a given number Find 1% of a given number Use the information to find different percentages of numbers | Assessment<br>Termly Arithmetic Test<br>(testbase) |
|--------|--|---|--|--|
| Term 5 | Properties of shape Recognise regular and irregular polygons Recognise the properties of different triangles and quaddrilaterals Identify 3d shapes from 2d representations Estimate and compare angles Measure Angles Draw Angles Identify angles at a point, straight line and right angle | Converting units of measure   | Area and Perimeter   | Termly Arithmetic Test<br>(testbase)               |
| Term 6 | Geometry - Position and<br>Direction   | Time  | Statistics   | Assessment<br>Termly Arithmetic Test<br>(testbase) |

|        | Year 6 Curriculum Overview                       |   |  |   |                 |  |  |
|--------|--|---|--|---|-----------------|--|--|
|        | Arithmetic Focus                                 |   | Maths Topics   |   |                 |  |  |
| Term I | Mixed times table recall  X/÷ by 10,100 and 1000 | Place Value Read and write numbers to I million  Determine the value of each digit  Compare and order numbers to I million  Rounding number up to I million  Counting forwards and back in powers of IO  Negative Numbers  recognise and describe linear number sequences  Roman Numerals to 1000 (M) | Decimals  Read and write numbers to up to 3dp  Compare and order numbers with up to 3dp  Rounding decimal numbers to the nearest whole number and given number of dp   | Multiplication  Identify common factors, common multiples and prime numbers  Recognise and calculate with prime numbers  Multiply 4 digits by a single digit  multiply one-digit numbers with up to two decimal places by whole numbers  multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication | Assessment 2017 |  |  |
| Term 2 |  | Division  divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division  Divide numbers up to 4 digits by a single-digit number short division  Interpret remainders as whole  | Converting measure  Multiplying and dividing by 10,100 and 1000  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, up to three decimal places | Fractions se common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions > I Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions 7  | Assessment 2018 |  |  |

|        | number remainders, fractions, or<br>by rounding, as appropriate for<br>the context | Convert between miles and kilometres   | Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 4   x 2   = 8   ]  Divide proper fractions by whole numbers [for example, 3   + 2 = 6   ]  Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 8 3 ] |                 |
|--------|--|--|--|-----------------|
| Term 3 | Fractions/Decimals/Percentage<br>s   | Ratio and Proportion 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 the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison Solve problems involving similar shapes where the scale factor is known or can be found * solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. |  | Assessment 2019 |

| Term 4                         |   | 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. | Shape draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | Area and Perimeter  Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3]. | Assessment 2022 |
|--------------------------------|---|--|---|---|-----------------|
| Term 5                         |   | Revision   | Revision  | SATs  | SATs            |
| Additional<br>Maths<br>Lessons | Maths Taught in Additional<br>Maths Lessons from Term 3 | Addition and Subtraction   | Calculating with Fractions  | 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.  |                 |