| Year Group | YEAR 4 2023-2024 <br> Objectives highlighted in yellow are 'Ready to Progress criteria' - children need to be secure on these before moving on <br> PROBLEM SOLVING AND REASONING MUST BE INCORPORATED INTO ALL TOPICS FOR ALL CHILDREN. |
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| Autumn 1 | Number - Place Value |
|  | Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100 4NPV-1 |
|  | Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning. 4NPV-2 |
|  | Reason about the location of any 4 digit number in the linear number system, including identifying the previous and next multiple of 100 and 1000(4NPV-3) |
|  | Count in multiples of 1000 |
|  | Find 1000 more or less than a given number |
|  | Order and compare numbers beyond 1000 |
|  | Identify, represent and estimate numbers using different representation |
|  | 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 |
|  | Round any number to the nearest 10, 100 or 1000 (4NPV-3) |
|  | Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with $2,4,5$ and 10 equal parts. (4NPV-4) |
|  | Solve number and practical problems that involve all of the above and with increasingly large positive numbers, number and place value <br> 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 <br> Measurement- Area |
|  | Find the area of rectilinear shapes by counting squares |
| Autumn 2 | Number- Multiplication and Division |
|  | Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. (4MD-2) |
|  | Recall multiplication and division facts for multiplication tables up to $12 \times 12$ <br> (4NF-1) Count in multiples of 6, 7 and 9 |
|  | Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; <br> Multiply together 3 numbers |
|  | Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.(4NF-2) Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) (4NF-3) |
|  | Count in multiples of 25 |
|  | Recognise and use factor pairs and commutativity in mental calculations Recall multiplication and division facts for multiplication tables up to $12 \times 12$ |


|  | Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5) Find the effect of multiplying and 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 (4MD-1) Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) (4NF-3) <br> Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as $n$ objects are connected to $m$ objects <br> Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. (4MD-2) <br> Understand and apply the distributive property of multiplication.(4MD-3) |
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| Spring 1 | Number- Multiplication and Division |
|  | Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout Divide 2-digit and 3-digit numbers by a 1-digit : 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 |
|  | Measurement-Length and Perimeter |
|  | Convert between different units of measure, estimate, compare and calculate different measures, including money in pounds and pence <br> Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres |
|  | Find the perimeter of regular and irregular polygons4G-2 |
|  | Solve simple perimeter and measure problems |
| Spring 2 | Measurement - Time |
|  | Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days <br> Read, write and convert time between analogue and digital 12- and 24-hour clocks <br> Number - Fractions |
|  | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3) |
|  | Recognise and show, using diagrams, families of common equivalent fractions Count up and down in hundredths; |
|  | Reason about the location of mixed numbers in the linear number system. 4F-1 Convert mixed numbers to improper fractions and vice versa 4F-2 |
|  | Add and subtract fractions with the same denominator |
|  | Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers. 4F-3 |
|  | 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 <br> Number - Decimals |
|  | Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3) Recognise and write decimal equivalents of any number of tenths or hundredths Compare numbers with the same number of decimal places up to 2 decimal places Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths |
| Summer 1 | Number - Decimals |
|  | Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 <br> Recognise and show, using diagrams, families of common equivalent fractions |


|  | Recognise and write decimal equivalents of any number of tenths or hundredths Solve simple measure and money problems involving fractions and decimals to 2 decimal places <br> Compare numbers with the same number of decimal places up to 2 decimal places <br> Round decimals with 1 decimal place to the nearest whole number <br> Recognise and write decimal equivalents to $1 / 4,1 / 2$ and $3 / 4$ <br> Measurement - Money <br> Estimate, compare and calculate different measures, including money in pounds and pence |
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| Summer 2 | Geometry - Shape and Position and Direction |
|  | Identify acute and obtuse angles and compare and order angles up to 2 right angles by size |
|  | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes -4G-2 |
|  | Identify lines of symmetry in 2-D shapes presented in different orientations -4G-3 |
|  | Complete a simple symmetric figure with respect to a specific line of symmetry-4G-3 |
|  | Statistics |
|  | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs |
|  | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs |
|  | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs <br> Position and Direction |
|  | Describe positions on a 2-D grid as coordinates in the first quadrant-4G-1 |
|  | Describe movements between positions as translations of a given unit to the left/right and up/down - 4G-1 |
|  | Plot specified points and draw sides to complete a given polygon - 4G-1 |
| objectives | The continuous objectives are woven into the teaching continually during the year. Children are given continual and regular opportunities to apply their knowledge to problem solving and reasoning. <br> Solve number and practical problems that involve all of the above and with increasingly large positive numbers, number and place value <br> - estimate and use inverse operations to check answers to a calculation <br> - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why <br> - 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 <br> - 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 <br> - solve simple measure and money problems involving fractions and decimals to two decimal places <br> - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days |
| Key Basic | Count from zero in multiples of 6, 7, 9, 25 and 1000 using bridging |
| skills to be | strategies as appropriate |
| taught | Use knowledge of complements to 100 to find change from whole pounds |
| continuously | Use knowledge of complements to 60 to calculate time within an hour |
|  | Recall multiplication facts and related division facts for tables up to $12 \times 12$ |
|  | Read and write numbers up to 10000 and recognise the place value of each digit |

Recognise the place value of each digit in a four-digit number
Compare and order numbers up to 10000
Partition numbers into place value columns
Partition numbers in different ways
Round any four-digit number to the nearest 10, 100 and 1000
Use rounding to support estimation and calculation
Use knowledge of place value to derive new addition and subtraction facts
Use knowledge of inverse to derive associated addition and subtraction
facts and check answers
Double any number between 1 and 100 and find all corresponding halves
Add and subtract mentally THTU $\pm \mathrm{U}, \mathrm{THTU} \pm \mathrm{T}, \mathrm{THTU} \pm \mathrm{H}, \mathrm{TU} \pm \mathrm{TU}$ and HTU $\pm T U$

Multiply numbers including decimals by 10 and 100
Divide decimal numbers (to one decimal place) by 10
Divide four-digit whole numbers by 100
Use knowledge of inverse to derive associated multiplication and division facts
Use known facts to derive new facts
Use known facts to derive equivalent facts
Count up and down in tenths and hundredths and recognise the equivalent decimal values
Recall fraction and decimal pairs to 1
Identify fractions greater or less than a half
Identify equivalent fractions
Order, add and subtract fractions with the same denominator
Recognise decimal equivalents of fractions with a denominator of ten and one hundred and also decimal equivalents of half, one quarter and three quarters Round decimals with one decimal place to the nearest whole number Tell and write the time from a 12-hour analogue clock and a clock with Roman numerals and a digital clock display Read, tell and write the time from a 24-hour clock Convert between 12 and 24-hour clocks
Convert between money and measures including time
Recognise right angles, straight angles, half and full turns and relate the turn to a measurement in degrees
Identify different types of angles including acute and obtuse

