|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 1 | $2 \times$ table fluency $\&$ revision PV- What is the value of this digit? Number bonds to 10/100/1000 including uneven partitions | ```4x table revision fluency & revision 2-digit by 1-digit multiplication 3-digit add/ subtract 3-digit``` | $7 x$ table fluency and recall including inverse and place value versions | $9 \times$ table fluency and recall including inverse and place value versions | $12 \times$ table fluency and recall including inverse and place value versions | Properties of 2d and 3d shapes including symmetry and internal angles |
|  | Finding pairs with a total of 100; adding to the next multiple of 100 and subtracting to the previous multiple of 100 ; subtract by counting up to find a difference; adding several numbers | Double 3-digit numbers and halve even 3-digit numbers; revise unit fractions; identify equivalent fractions; reduce a fraction to its simplest form; count in fractions (each fraction in its simplest form) | Place 4-digit numbers on landmarked lines; 0-10 000 and 1000-2000; round 4-digit numbers to the nearest 10,100 and 1000; mentally add and subtract to/from 4 -digit and 3 -digit numbers using place-value; count on and back in multiples of 10,100 and 1000 ; count on in multiples of 25 and 50 ; add and subtract multiples of 10 and 100 to/from 4-digit numbers | Recognise, use, compare and order decimal numbers; understand place value in decimal numbers; recognise that decimals are tenths; round decimals numbers to the nearest whole number; divide 2digit numbers by 10 to get decimal numbers; multiply decimal numbers by 10 to get 2-digit numbers; divide 3-digit multiples of ten by 100 to get decimal numbers; multiply decimal numbers by 100 to get 3-digit multiples of ten; add four digit numbers using written method with answers greater than 10000 | Read, write and compare 4-digit numbers and place on a line; find 1000 more or less than any given number; read, write and compare 5-digit numbers; recognise what each digit represents in a 5 -digit number; read, use and compare negative numbers in the context of temperature | Add two 2-digit numbers or a 2digit number to a 3- or 4-digit number mentally; subtract 2-, 3and 4 -digit numbers using counting up; derive factors of 2-digit numbers and use factors and doubling to solve multiplication mentally; solve integer scaling problems using mental strategies and spot a relationship between products; solve correspondence problems, using a systematic approach and calculate using mental multiplication strategies |
| Week 2 | $5 x$ table fluency $\&$ revision PV- what is the value of this digit? Fluent number bonds to 20 including uneven partitions Ordering large numbers | 4xtable fluency and recall including inverse and place value versions <br> 2-digit by 1-digit multiplication 3-digit add/subtract 3-digit | $7 x$ table fluency and recall including inverse and place value versions | $9 \times$ table fluency and recall including inverse and place value versions | $9 \times$ table fluency and recall including inverse and place value versions | Telling the time to the nearest 1/5/15minute Finding difference between time |
|  | Read, write 4-digit numbers and know what each digit represents; compare 4-digit numbers using < and $>$ and place on a number line; add 2-digit numbers mentally; subtract 2-digit and 3-digit numbers | Look at place value in decimals and the relationship between tenths and decimals; add two 4-digit numbers; practise written and mental addition methods; use vertical addition to investigate patterns | Use expanded written subtraction and compact written subtraction to subtract pairs of 3-digit numbers (one 'exchange'); use expanded column subtraction and compact column subtraction to subtract pairs of 3-digit and 2-digit numbers from 3-digit numbers (one 'carry'); learn the $7 \times$ table and 'tricky' facts; use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; solve simple money problems with decimals to two decimal places | Add amounts of money using written methods and mentally using place value and number facts; choose to add using the appropriate strategy: mental or written; subtract, choosing appropriate mental strategies: counting up or taking away (using counting back, place value or number facts); solve subtractions using a suitable written method (column subtraction) | Multiply and divide numbers by 10 and 100 including decimals (tenths and hundredths); read and write decimals (to 1 and 2 places), understanding that these represent parts (tenths and hundredths) of numbers; mark 1- and 2-place decimals on a line; count in tenths (0.1s) and hundredths (0.01s); multiply numbers with up to 2 decimal places by 10 and 100, and divide numbers by 10 and 100 ; say the number one tenth and one hundredth more or less than a given number; round decimal numbers to the nearest whole number | Solve written addition of two 4digit numbers; add amounts of money (pounds and pence) using column addition; solve 4-digit minus 4 -digit and 4 -digit minute 3 digit subtractions using written column method (decomposition) and check subtraction with addition; solve word problems choosing an appropriate method |


| Week 3 | $5 \times$ table |
| :---: | :---: |
| PV- what is the value of this digit? |  |
| Number bonds to 50 |  |
| Ordering numbers |  | Learn $\times$ and $\div$ facts for the 6 and 9 times-table and identify patterns mutiply multiples of 10 by single digit numbers; multiply 2-digit numbers by single-digit numbers (the grid method); find fractions of amounts

$3 \times$ table
PV- what is the value of this digit?
Number bonds to 50
Ordering numbers

Tell and write the time to the minute on analogue and digital clocks; calculate time intervals; measure in metres, centimetres and millimetres; convert lengths between units; record using decimal notation

> 4x table 2-digit by 1-digit multiplication 3-digit add 3-digit

## Convert multiples of 100 g into

kilograms; convert multiples of
100 ml into litres; read scales to the
nearest 100 ml ; estimate
capacities; draw bar charts, record and interpret information

$$
\begin{gathered}
\text { 6x table } \\
\text { 2-digit by 1-digit multiplication } \\
\text { 3-digit add 3-digit }
\end{gathered}
$$

3-digit subtract 3-digit
nearest: 10, 100 and 1000; subtract 3 -digit numbers using the expanded written version and the counting up mental strategy and decide which to use

## 6x table 2-digit by 1 -digit multiplication including reasoning

Use the grid method to multiply 3digt by single-digit numbers and introduce the vertical algorithm; begin to estimate products; divide numbers (up to 2 digits) by singledigit numbers with no remainder, then with a remainder
$7 x$ table including inverse and
place value versions

## place value versions

se mental multiplication and division strategies; find non-unit fractions of 2-digit and 3-digit numbers; find equivalent fractions and use them to simplify fractions (halves, thirds, quarters) Recognise and compare acute, right and obtuse angles; draw lines of a given length; identify perpendicular and parallel lines; recognise and draw line symmetry in shapes; sort 2D shapes according to their properties; draw shapes with given properties and explain reasoning; draw the other half of symmetrical shapes
$8 \times$ table including inverse and place value versions

Understand how to divide 2-digit and 3-digit numbers by 1-digit numbers using place value and mental strategies; divide numbers by 1 -digit numbers to give answers between 10 and 25 , with remainders; identify factor pairs

Tell the time on a 24 hour clock, using am and pm correctly; convert pm times to 24 hour clock and vice versa; use 24 hour clock in calculating intervals of time; measure and calculate perimeters of rectilinear shapes where each side is labelled in cm and m ; find missing lengths in rectilinear composite shapes; find the perimeters of rectilinear shapes with some lengths not marked; convert from one unit of length to another; solve word problems involving lengths including those involving perimeters
$11 \times$ table including inverse and place value versions

Understand place value in 4-digit numbers; partition 4-digit numbers; solve subtraction of 4digit numbers using column subtraction (decomposition) choose an appropriate method to solve subtractions, either mental or written, and either column or counting up (Frog)
$11 \times$ table fluency and recall
Balancing missing number problems (e.g _- $\times 10=4 \times 5$ )

## Use the vertical algorithm to

 multiply 3-digit numbers by 1-digit numbers; explore patterns; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1 -digit numbers to give answers between 10 and 35 ,$12 \times$ table including inverse and place value versions

Learn 11 and $12 \times$ tables; develop and use effective mental multiplication strategies; use a vertical written method to multiply 3-digit numbers by 1-digit numbers; use rounding to estimate answers; use a written method to multiply 3 -digit numbers, including amounts of money by 1-digit numbers; multiply 2 -digit and 3digit numbers by 1-digit numbers, understand how division 'undoes' multiplication and vice versa; divide above the tables facts using multiples of 10
Calculating time intervals

Recognise and read Roman numerals to 100; begin to know the history of our number system including 0; calculate area and perimeter of rectilinear shapes using multiplication and addition, or counting; recognise, name and classify 2D shapes identifying regular and irregular polygons; sort 2D shapes according to properties including types of quadrilaterals and triangles; revise 3D shapes, consider 2D-shaped sides on 3D shapes, and sort shapes
Rounding to nearest 10/100

Understand, read and write 2-place decimals; compare 2-place decimals in the context of lengths; add and subtract 0.1 and 0.01 and say a number one-tenth ( $0 \cdot 1$ ) or one-hundredth ( 0.01 ) more or less than a given number; revise

Placing values on a number line (including negative/ decimal/ fraction values)

Use coordinates to draw polygons; find the coordinates of shapes after translation; draw and interpret bar charts and pictograms; draw line graphs and understand that intermediate points have meaning

Converting units of measure

Use the vertical algorithm (ladder) to multiply 3-digit numbers by 1 digit numbers; find non-unit fraction of amounts, using 'chunking'; add fractions with like denominators, including totals greater than 1 ; divide by 10 and 100 (to give answers with 1 and 2 decimal places)

Area and perimeter including composite shapes

Multiply 2-digit numbers by 11 and 12; look for patterns and write rules; multiply 2-digit numbers by numbers between 10 and 20 using the grid method; begin to use the grid method to multiply pairs of 2 digit numbers; use mental

|  |  |  | and use these to solve multiplications and divisions with larger numbers; use Frog to find complements to multiples of 1000 ; use Frog to find change from $£ 10$, $£ 20$ and $£ 50$ | without remainders; solve word problems | equivalent fractions; write fractions with different denominators with a total of 1; recognise decimal and fraction equivalents | strategies and tables facts to divide 2 -digit and 3 -digit numbers by 1 digit numbers to give answers between 20 and 50 , with and without remainders; find non-unit fractions of amounts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 6 | 3x table PV- what is the value of this digit? Number bonds to 10 Ordering numbers | 6x table <br> 2-digit by 1-digit multiplication <br> 3-digit add 3-digit <br> 3-digit Subtract 3-digit | $8 \times$ table <br> < > number problems | $11 \times$ table Adding/subtracting money and finding change | Reading timetables/ calendars and interpreting graphs | 2d and 3d shape properties and sorting Acute/obtuse and reflex angles |
|  | Number and place value revision week | Number and place value revision week including money | Time and statistics revsion week | Geometry revision week | Fractions and decimals revision week | Shape revision week |

