## Place value <br> LI: To read and write 4 digit

 numbers.LI: To partition 4 digit numbers.
LI: To understand the importance of zero as a place holder.
LI: To know what each digit represents in 4 digit numbers.
LI: To compare and order 4 digit numbers. LI: To calculate 10, 100 and 1000 more than a given number.
LI: To calculate 10, 100 and 1000 less than a given number.

## Addition

LI: To know addition and subtraction facts to 100 using partitioning.
LI: To mentally add two 2 digit numbers.
LI: To solve problems using mental addition.
LI: To add 3 digit numbers using the column method.
LI: To solve addition missing number problems using the column method.

## Subtraction

LI: To mentally subtract two 2-digit numbers.
LI: To solve problems using mental subtraction
LI: To subtract 3 -digit numbers with exchanges using the column method.

## Place value <br> LI: To round any number to

 the nearest 10 .LI: To round any number to the nearest 100 .
LI: To round any number to the nearest 1000 .
LI : To use rounding to estimate an answer. LI: To solve number problems.

## Add and subtract

LI: To add multiples of 10 , 100 and 1000 to four digit numbers using place value in a variety of contexts. LI: To add multiples of 10 , 100 and 1000 to four digit numbers using place value in a variety of contexts. LI: To add 4-digit numbers using the written method. LI: To subtract 4-digit numbers using the written method.
LI: To use the inverse to check calculations. LI: To solve two-step problems in a range of contexts.

## Measures

LI: To convert
measurements using multiplication.
LI: To solve problems in a range of contexts, using relationships between familiar units and conversion.
Place
LI:
us
LI:
and
R
Li:
s
r
Ll:

## Place value

LI: To calculate numbers using Roman numerals. LI: To understand, apply and explain the rules of Roman numerals.
LI: To explore number sequences and explain the rule of the sequence. LI: To complete missing numbers in a sequence and find the rule.
LI: To position positive and negative numbers on a number line.
LI: To calculate number sequences using negative numbers.
LI: To compare and order positive and negative numbers.
LI: To solve problems involving negative numbers.

## Addition and subtraction

LI: To add mentally a twodigit number to a three-digit multiple of 10 .
LI: To subtract mentally a two-digit number from a three-digit multiple of 10 . LI: To add numbers up to four digits using the written method.
LI: To subtract numbers up to four digits using the written method.
LI: To solve multi-step word problems explaining my reasoning.

| Term 4 |
| :--- |
| Multiplication and |
| division |
| LI: To multiply two digit | numbers by a single digi using the written method. LI: To consolidate multiplying two digit numbers by a single digit using the written method and apply to problems. LI: To divide three-digit numbers by a single digit number using partitioning. LI: To consolidate dividing three-digit numbers by a single digit number using partitioning.

LI: To solve multiplication and division word problems.

## Geometry - shapes

LI: To identify properties of 2D shapes.
LI: To solve problems using shapes. LI: To read and plot co-ordinates in the first quadrant.
LI: To know what $(3,2)$ means.
LI: To plot the missing points of squares and rectangles given some of the vertices.

## Fractions and decimals

LI: To identify whether a fraction is more or less than half and explain why. LI: To use knowledge of factors and multiples to find equivalent fractions.

## Number and place value

LI: To understand place value with four-digit numbers.
LI: To compare order and identify missing numbers. LI: To count forward and backwards using positive and negative numbers. LI: To calculate 10, 100 and 1000 more or less than a number.
LI: To find the number that is half-way between given numbers.
LI: To extend number sequences involving decimals.
LI: To predict numbers that will occur in a sequence. LI: To solve non-routine number problems.

## Addition and subtraction

 LI: To mentally calculate 3 digit numbers to equal a multiple of 1000.LI: To add numbers mentally.
LI: To subtract numbers mentally.
LI: To add using the column method. LI: To subtract using the column method.
LI: To know how much more needs to be added to make the next pound. LI: To add and subtract money by rounding and adjusting.

Division
LI: To mentally solve division calculations including remainders. LI: To divide two-digit by a single division using short division. (2 lessons) LI: To solve one and two step problems using appropriate methods. Ll: To solve
correspondence problems. LI: To solve non-routine problems and interpreting the information.

## Fractions and decimals

LI: To calculate decimal pairs of tenths with a total of 1.
LI: To position numbers with 1dp on a number line. LI: To round decimals with 1d.p. to the nearest whole number.
LI: To identify the effect of dividing a 1 or 2-digit number by 10 and 100 and describing the pattern. LI: To identify decimal and fraction equivalences. (e.g. $1 / 4=0.25,25 / 100$ ). LI: To find fractions of amounts and shapes. LI: To solve problems involving fractions of numbers, shapes and quantities.
LI: To solve one step problems using money. LI: To solve two-step problems using money.

LI: To solve subtraction missing number problems using the column method LI: To investigate addition and subtraction.

## Multiplication and

## division

LI: To use arrays to reinforce connection between multiplication and division.
LI: To double numbers to link 3, 6 and 12 times tables.
LI: To multiply 3-digit numbers by 10 and 100 with whole answers. LI : To explain the method of multiplying by 10 and
100.

I: To divide 3-digit numbers by 10 and 100 with whole answers. LI: To explain the method of dividing by 10 and 100 LI: To investigate whether dividing by 10 and 10 again is the same as dividing by 100.

LI: To solve scaling problems by multiplying and dividing by 10 and 100 LI: To multiply 2 and 3 digit numbers by a single digit using the expanded method.
LI: To multiply 2 and 3 digit numbers by a single digit using the expanded method.
LI : To divide 2 and 3 digit numbers by a single digit using partitioning and known facts

LI: To estimate the capacit of containers using known knowledge.
LI : To read a range of partly numbered scales to measure capacity. $\mathrm{LI}:$ To solve problems involving comparing and calculating capacity. LI: To estimate and measure the mass of objects.
LI: To read a range of partly numbered scales to measure mass.
LI: To solve problems involving comparing and calculating mass. LI : To solve one step money problems.
LI: To compare and order time durations.
LI : To estimate and read time with increasing accuracy to the nearest minute on analogue and digital clocks.
LI: To write the time to the nearest minute.
Ll: To solve problems including finding a time difference, start and end times

## Geometry

LI: To know that quadrilaterals are four sided polygons. LI: To recognise and describe quadrilaterals. LI: To identify the angle and side properties of different triangles. LI: To sort polygons based on their properties, justify

LI: To estimate an answer to a calculation using rounding.
LI: To subtract amounts of money in a real-life context. LI: To use inverse operations to check answers to calculations. LI: To solve a range of missing number problems.

## Multiplication and

## division

LI: To use doubling to connect the 3,6 and 12 times tables.
LI : To calculate multiples of numbers and understand the term product
LI: To calculate factor pairs of numbers.
LI : To multiply and divide multiples of 10 using place value
LI: To commutatively multiply and mentally using multiples of 10 .
LI: To investigate whether dividing by 10 and 10 again has the same effect as dividing by 100
LI: To solve problems involving scaling by multiplying and dividing by 10 and 100.
LI: To multiply two and three digit numbers by a single digit numbe mentally.
LI: To estimate an answer by rounding
LI: To multiply two-digit numbers by a single digit using the written method.

LI: To compare and order simple fractions using knowledge of equivalences. LI: To identify and write the decimal equivalences to tenths and hundredths.
LI: To know what each digit represents in decimal numbers (to 2d. p). LI: To compare and order amounts with the same amount of digits up to 2d.p. LI: To solve decimal problems involving money and measure.

## Measures - time

LI: To convert 12-hour to
24- hour times.
LI: To recognise the difference between am times from midnight to before noon and pm times from noon to before midnight.
LI: To solve time problems involving the 24-hour clock.

## Measures

LI: To measure and draw lines with increasing accuracy to the nearest $1 / 2$ cm.

LI: To calculate the perimeter of rectilinear shapes (regular and compound) by measuring the length of the sides. LI: To calculate the perimeter of rectilinear shapes (regular and compound) from given measurements
LI: To investigate what lengths of the sides a rectangle could be when given a perimeter.

LI: To find totals using mental and written methods. (In the context of money)
LI: To estimate and solve money problems.
LI: To solve two-step money problems.

## Multiplication

LI: To mentally multiply three digit numbers. (Using commutativity).
LI: To solve problems mentally using known factor pairs.
LI: To multiply two-digit and 3 digit numbers by a single digit. (Using the written method).
LI: To estimate an answer using knowledge of rounding and inverse.
LI : To solve problems using inverses and number properties.

## Measures

LI: To calculate the perimeter of rectilinear shapes with given measurements.
LI: To find the area of rectilinear shapes by counting the squares. LI: To find the area of shapes including half squares.
LI: To find the area of shapes using multiplication acts.
LI: To investigate different shapes that can be made with a given area.
LI: To measure and record lengths using decima notation.
LI: To order and compare lengths using decimals.

## Time

LI: To know key facts about time.
LI: To read and write the time consistently correct. LI: To use a number line to solve time differences
LI: To use a calendar to
work out time intervals and day of the week for a given date.
I: To solve problems converting larger to smaller units of time. (e.g. have you lived for more or less than 500 weeks?)

## Geometry

I: To complete a simple symmetrical shape or pattern.

Fractions
LI: To read, write and understand fractions. LI: To order fractions with the same denominator on a number line.
LI: To identify fractions of shapes and diagrams.
LI: To identify the equivalence between equivalent fractions. LI: To show equivalent fractions by shading shapes.
LI: To explore the equivalence between tenths and hundredths. LI: To add and subtract fractions with the same denominator.
reasoning and explain why some shapes may not fit. LI: To describe properties of polygons using mathematical vocabulary. LI: To investigate properties of 2D shapes.

## Statistics

LI: To collect data in a
frequency table.
LI: To present data in a bar chart with the correct labels and a title.
LI: To interpret data on a bar chart and solve comparison problems LI: To solve sum and difference problems using a bar chart.
LI: To evaluate the effect of different scales on interpreting the data.

LI: To divide three-digit numbers by a single digit number using partitioning. LI: To solve multiplication and division word problems.

LI: To recognise that the perimeter of a rectangle can be found by doubling the sum of the longer and shorter sides.
Ll: To know and use the relationships between kilometres, metres centimetres and millimetres.
LI: To estimate, measure and compare lengths practically.

## Statistics

LI: To record and present data on a pictogram. LI: To solve comparison problems
LI: To interpret data present on pictograms and solve sum and difference problems.
$\mathrm{LI}:$ To solve problems using information taken from tables.

LI: To identify lines of symmetry in shapes and their orientation
LI : To identify a line of symmetry when it does not dissect a shape.
LI: To describe the
translation of a shape.
LI: To describe translations
using co-ordinates.

## Statistics

LI: To understand the difference between discrete and continuous data.
LI: To collect continuous data (e.g. distance ran over time on the playground including a break).
LI: To present and interpret continuous data.

