



# Year 5 Curriculum mapping

## Number- Place Value

Read, write, order and compare numbers to at least 1,000,000 and 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

Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

## Number -Addition & subtraction

Add and subtract whole numbers with more than 4 digits, including using formal written methods

Add and 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

## Number: Fractions

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

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than 1 as a mixed number

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

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  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$ , and those fractions with a denominator of a multiple of 10 or 25

Learning objectives in **blue** are priority skills- go to the next page

Learning objectives in **green** are revisited in Year 6. Go to page 3 to see the relevant 46 LO and some tips on getting a headstart!

## Measurement

Convert between different units of metric measure

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 and square metres and estimate the area of irregular shapes

Estimate volume and capacity

Solve problems involving converting between units of time

Use all four operations to solve problems involving measure using decimal notation, including scaling

## Number -Multiplication & division

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 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 and cubed

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.

## Statistics

Solve comparison, sum and difference problems using information presented in a line graph

Complete, read and interpret information in tables, including timetables

## Geometry

Identify 3D shapes, including cubes and other cuboids, from 2D representations

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

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

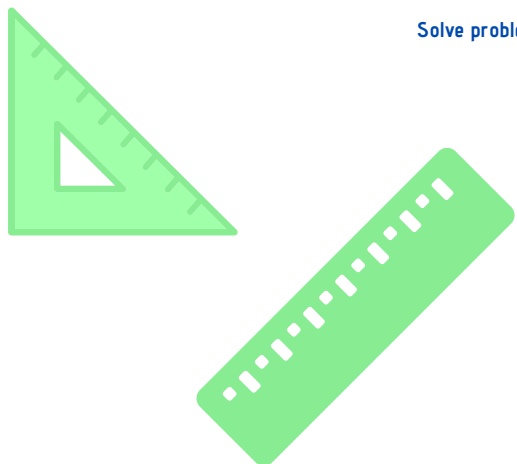
Draw given angles, and measure them in degrees

Identify: angles at a point and one whole turn; angles at a point on a straight line and a turn; other multiples of 90

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

# Year 5 priority learning objectives

These Year 5 learning objectives are priority skills because they are not in the Year 6 curriculum and are necessary to be able to move on with the Year 6 curriculum.



## Number- Place Value

Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

## Number -Addition & subtraction

Add and subtract numbers mentally with increasingly large numbers

## Number -Multiplication & division

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 numbers

Establish whether a number up to 100 is prime and recall prime numbers up to 19

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 and cubed

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.

## Number: Fractions

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

## Measurement

Estimate volume and capacity

## Geometry

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

## Statistics

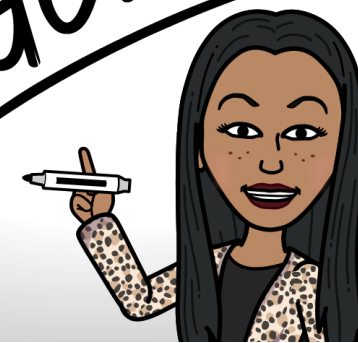
Complete, read and interpret information in tables, including timetables

There is a worksheet to complete for each learning objective.



Click on the video icon in the top right corner of each worksheet to open up the lesson tutorial which will guide your child through the activity.

# #GOALS



My Pocket  
**Private  
Tutor**

# Year 5 LO matched to Year 6 LO

## Number- Place Value

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit

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

## Number -Addition & subtraction

Add and subtract whole numbers with more than 4 digits, including using formal written methods

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

## Number -Multiplication & division

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

## Number: Fractions

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

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than 1 as a mixed number

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

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents

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  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$ , and those fractions with a denominator of a multiple of 10 or 25

These learning objectives are revisited in the *Pocket Private Tutor* app as part of Year 6 learning objectives.

There are lesson videos and worksheets including Past SATs questions which cover these remaining Year 5 Learning objectives.

Check which 46 LO each 45 relates to so you can find the learning material you need on the app.



## Number- Place Value

Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit

Use negative numbers in context, and calculate intervals across zero

Round any whole number to a required degree of accuracy

## Number -Calculation

Solve problems involving addition, subtraction, multiplication and division

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

## Number -Calculation

Multiply multi digit numbers up to 4 digits by a two digit whole number using the formal written method of long multiplication

Perform mental calculations, including with mixed operations and large numbers

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

## Number: Fractions

All of the fraction skills on the left are covered in the *Pocket Private Tutor App for Year 6 Maths* under the following objectives . There will be a combination of 45 objectives covered in each lesson

Compare and order fractions

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Multiply simple pairs of proper fractions, writing the answer in its simplest form

Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction

Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

# Year 5 LO matched to Year 6 LO

## Measurement

Convert between different units of metric measure

Use all four operations to solve problems involving measure using decimal notation, including scaling

Solve problems involving converting between units of time

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 and square metres and estimate the area of irregular shapes

## Geometry

Identify 3D shapes, including cubes and other cuboids, from 2D representations

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

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

## Statistics

Solve comparison, sum and difference problems using information presented in a line graph

These learning objectives are revisited in the *Pocket Private Tutor* app as part of Year 6 learning objectives.

There are lesson videos and worksheets including Past SATs questions which cover these remaining Year 5 Learning objectives.

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## Measurement

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, using decimal notation to up to three decimal places

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

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

## Geometry

Recognise, describe and build simple 3D 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

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

## Statistics

Interpret and construct pie charts and line graphs and use these to solve problems