

Autumn	Spring	Summer
<p><u>Number and Place Value</u></p> <ul style="list-style-type: none"> • 3 Count forwards/backwards in steps of powers of 10 for any given number up to 1,000,000. • 8 Keep multiplying a number by 10 or 100 up to 1,000,000 and count back • 5 Recognise the place value of any number up to 1,000,000. • 1 Read, write, order and compare numbers to at least 1,000,000 (one million) and say the value of each digit • 7 Round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000 • 10 Solve number and practical problems that involve ordering and comparing numbers to 1 000 000, counting forwards or backwards in steps, negative numbers and rounding <p><u>Addition and Subtraction (+ focus)</u></p> <ul style="list-style-type: none"> • 15 Add and subtract 2 and 3 digit numbers in my head • 13 Add and subtract numbers with up to 4 digits using formal written methods 	<p><u>Multiplication and Division (division focus)</u></p> <ul style="list-style-type: none"> • 21 Divide numbers with up to 4 digits by a one digit number using formal written methods and can explain remainders • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates <p><u>Measurement (capacity)</u></p> <ul style="list-style-type: none"> • 43 Convert between different forms of metric measurement e.g. Kilometre and metre; centimetre and metre; centimetre and millimetre, gram and kilogram, Litre and millilitre • 44 Understand and compare equivalences between metric units and common imperial units. These might include: inches, pounds or pints • 49 Use all four operations to solve problems involving measure such as length, mass, volume, money, using decimal notation, including scaling <p>Recap previous year group's statistics objectives in this context</p> <p><u>Statistics</u></p>	<p><u>Number and Place Value</u></p> <ul style="list-style-type: none"> • 2 Count forwards and backwards with positive & negative numbers through zero • 9 Use negative numbers in context when looking at temperature or money; counting forwards and backwards through 0 <p><u>Position and Direction</u></p> <ul style="list-style-type: none"> • 59 Plot positions on a 2D grid in the first 2 quadrants. • 58 Identify, describe and represent the position of a shape following a reflection or translation. I can use mathematical vocabulary to explain this and I know that the shape has not changed <p><u>Position and Direction</u></p> <ul style="list-style-type: none"> • 51 Estimate and compare acute, obtuse and reflex angles. I know that angles are measured in degrees • 52 Draw given angles and measure them in degrees • 53 Identify angles at a point and one whole turn

- 14 Use rounding to check answers to calculations and determine levels of accuracy
- 16 Solve addition and subtraction problems needing more than one step and can work out which operation and method is the most suitable

Addition and Subtraction (- focus)

- 15 Add and subtract 2 and 3 digit numbers in my head
- 13 Add and subtract numbers with up to 4 digits using formal written methods
- 14 Use rounding to check answers to calculations and determine levels of accuracy
- 16 Solve addition and subtraction problems needing more than one step and can work out which operation and method is the most suitable
- 28 Solve word problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- 29 Solve two step word problems involving all 4 operations

Multiplication and Division (X focus)

- 47 Interpret and create a variety of sorting diagrams (e.g. Venn, Carroll, branching databases)
- 46 Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Measurement (mass)

- 43 Convert between different forms of metric measurement e.g. Kilometre and metre; centimetre and metre; centimetre and millimetre, gram and kilogram, Litre and millilitre
- 44 Understand and compare equivalences between metric units and common imperial units. These might include: inches, pounds or pints
- 49 Use all four operations to solve problems involving measure such as length, mass, volume, money, using decimal notation, including scaling

Recap previous year group's statistics objectives in this context

Statistics

- 47 Interpret and create a variety of sorting diagrams (e.g. Venn, Carroll, branching databases)
- 46 Solve comparison, sum and difference problems using information

- 54 Identify angles at a point on a straight line and 1/2 a turn (total 180°)
- 55 Identify other multiples of 90°

Properties of Shape

- 57 Tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles
- 61 Use sorting diagrams to solve problems.
- 50 Identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- 23 Identify and use square and cube numbers and their notations

- 22 Multiply and divide whole and decimal numbers by 10, 100 and 1000
- 17 Find multiples and factors of a number and can identify factors common to 2 different numbers
- 19 Recall prime numbers up to 19.
- 24 Use vocabulary relating to prime numbers, prime factors and composite numbers
- 25 Work out if any given number up to 100 is a prime number
- 23 Identify and use square and cube numbers and their notations
- 27 Solve problems involving multiplication and division including using factors and multiples, squares and cubes
- 18 Use known tables to derive other number facts.
- 20 Multiply numbers with up to 4 digits by a one or two digit number using formal written methods (including long multiplication for 2 digit numbers)
- 29 Solve two step word problems involving all 4 operations

Fractions

presented in bar charts, pictograms, tables and other graphs

Measurement (length)

- 43 Convert between different forms of metric measurement e.g. Kilometre and metre; centimetre and metre; centimetre and millimetre, gram and kilogram, Litre and millilitre
- 44 Understand and compare equivalences between metric units and common imperial units. These might include: inches, pounds or pints
- 49 Use all four operations to solve problems involving measure such as length, mass, volume, money, using decimal notation, including scaling

Recap previous year group's statistics objectives in this context

Statistics

- 47 Interpret and create a variety of sorting diagrams (e.g. Venn, Carroll, branching databases)
- 46 Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
- 45 Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

- 30 Compare and order fractions whose denominators are all multiples of the same number
- 31 Find, name and write equivalent fractions of a given fraction including tenths and hundredths
- 32 Identify mixed numbers and improper fractions and convert from one to another such as $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$
- 35 Add and subtract fractions whose denominators are all multiples of the same number
- 33 Multiply fractions by whole numbers using objects and pictures

Number and Place value

- 34 Identify and use thousandths and can explain how they relate to tenths and hundredths and their decimal equivalents
- 4 Compare and order numbers with 3 decimal places.
- 6 Recognise the place value of any decimal number to 3 decimal places.
- 40 Solve problems involving numbers with up to three decimal places
- 37 Add and subtract decimals to 3 decimal places.

- 56 Use the properties of rectangles to find related facts, missing lengths and missing angles
- 23 Identify and use square and cube numbers and their notations
- 46 Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2), square metres (m^2) and estimate the area of irregular shapes
- 47 Estimate volume by using 1cm^3 blocks to build cuboids (including cubes) and capacity by using water and different container

Number and Place Value

- 12 Read Roman numerals to 1000 and recognise years written in these

Measurement (time)

- 62 Complete, read and interpret information in tables, including timetables
- 48 Solve time problems using timetables where I need to convert between units of time

Statistics

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

<ul style="list-style-type: none">• 38 Round numbers with two decimal places• 39 Read, write, order and compare numbers with up to three decimal places• 36 Read and write decimal numbers as fractions such as $0.71 = \frac{71}{100}$• 41 Identify the percent symbol % and how it relates to parts per hundred, hundredths and decimals42 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		
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Year 5 Medium Term Plan