

# Year 6 Spring Pathway

Spring term	Number <b>Ratio</b> VIEW	Number <b>Algebra</b> VIEW	Number <b>Decimals</b> VIEW	Number <b>Fractions decimals and percentages</b> VIEW	Measurement <b>Area, perimeter and volume</b> VIEW	<b>Statistics</b> VIEW
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## Ratio

- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
- Solve problems involving similar shapes where the scale factor is known or can be found

Assessment:  
Test:

## Decimals

- Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- Solve problems which require answers to be rounded to specified degrees of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Multiply 1-digit numbers with up to 2 decimal places by whole numbers
- Use written division methods in cases where the answer has up to 2 decimal places
- Solve problems involving addition, subtraction, multiplication and division

Assessment:  
Test:

## Statistics

- Interpret and construct pie charts and line graphs and use these to solve problems
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs (Year 4)
- Calculate and interpret the mean as an average

Assessment:  
Test:

## Algebra

- Use simple formulae
- Generate and describe linear number sequences
- Find pairs of numbers that satisfy an equation with two unknowns
- Enumerate possibilities of combinations of two variables
- Express missing number problems algebraically

Assessment:  
Test:

## F, D, P

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- Compare and order fractions, including fractions  $>1$
- Solve problems involving the calculation of percentages and the use of percentages for comparison

Assessment:  
Test:

## Area, Perimeter and Volume

- 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
- Calculate the area of parallelograms and triangles
- Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres ( $\text{cm}^3$ ) and cubic metres ( $\text{m}^3$ ), and extending to other units

Assessment:  
Test:

Number and Place value	Addition, subtraction, multiplication and division	Geometry (position and direction and properties of shape)	Fractions, decimals and percentages	Algebra	Data/Statistics
Numbers to 10 million	Order of Operations Bidmas Common factors Common multiples	Four quadrants Vertically opposite (angles) Circumference Radius Diameter	Degree of accuracy Simplify	Linear number Sequence Substitute Variables Symbol Known values	Mean Pie chart Construct