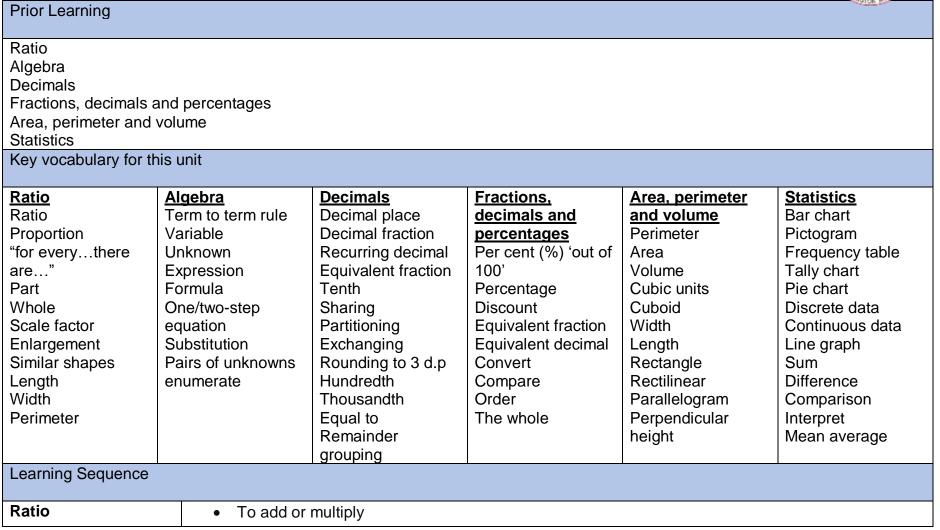
Year 6 Spring Maths





To use ratio language
To identify the ratio symbol
To link ratio with fractions
<ul> <li>To look at scale drawings and use scale factors</li> </ul>
To solve ratio and proportion problems
To look at ratio involving recipes
To look at 1 and 2 step function machines
To form expressions
To look at substitution
To look at formulae and form equations
To solve 1 and 2 step equations
To find pairs of values
<ul> <li>To solve problems with two unknowns</li> </ul>
To identify place values within 1
To look at place value in integers and decimals
To round decimals
To add and subtract decimals
<ul> <li>To multiply and divide by 10, 100 and 1000</li> </ul>
To multiply and divide decimals by integers
To look at fraction and decimal equivalents
To look at fractions as division
To understand percentages
<ul> <li>Equivalent fractions, decimals and percentages</li> </ul>
To order fractions, decimals and percentages

	<ul> <li>To find the percentage of an amount – 1 and 2 step</li> </ul>
Area, Perimeter and Volume	To look at shapes with the same area
	<ul> <li>To look at area and perimeter of shapes</li> </ul>
	<ul> <li>To find the area of a triangle (counting squares)</li> </ul>
	<ul> <li>To find the area of a right-angled triangle</li> </ul>
	To find the area of any triangle
	The find the area of a parallelogram
	To find the volume of a cuboid
Statistics	To look at line graphs
	To work with dual bar charts
	To read and interpret pie charts
	To draw pie charts
	To calculate the mean
Assessment milestones	
Mathematical skills:	

# Mathematical skills:

## 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
- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

## 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

#### 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
- Use written division methods in cases where the answer has up to 2 decimal places
- Solve problems involving addition, subtraction, multiplication and division

## Fractions, decimals and percentages

- 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

## 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 (cm3) and cubic metres (m3), and extending to other units

## **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)
- Interpret and construct pie charts and line graphs and use these to solve problems
- Calculate and interpret the mean as an average