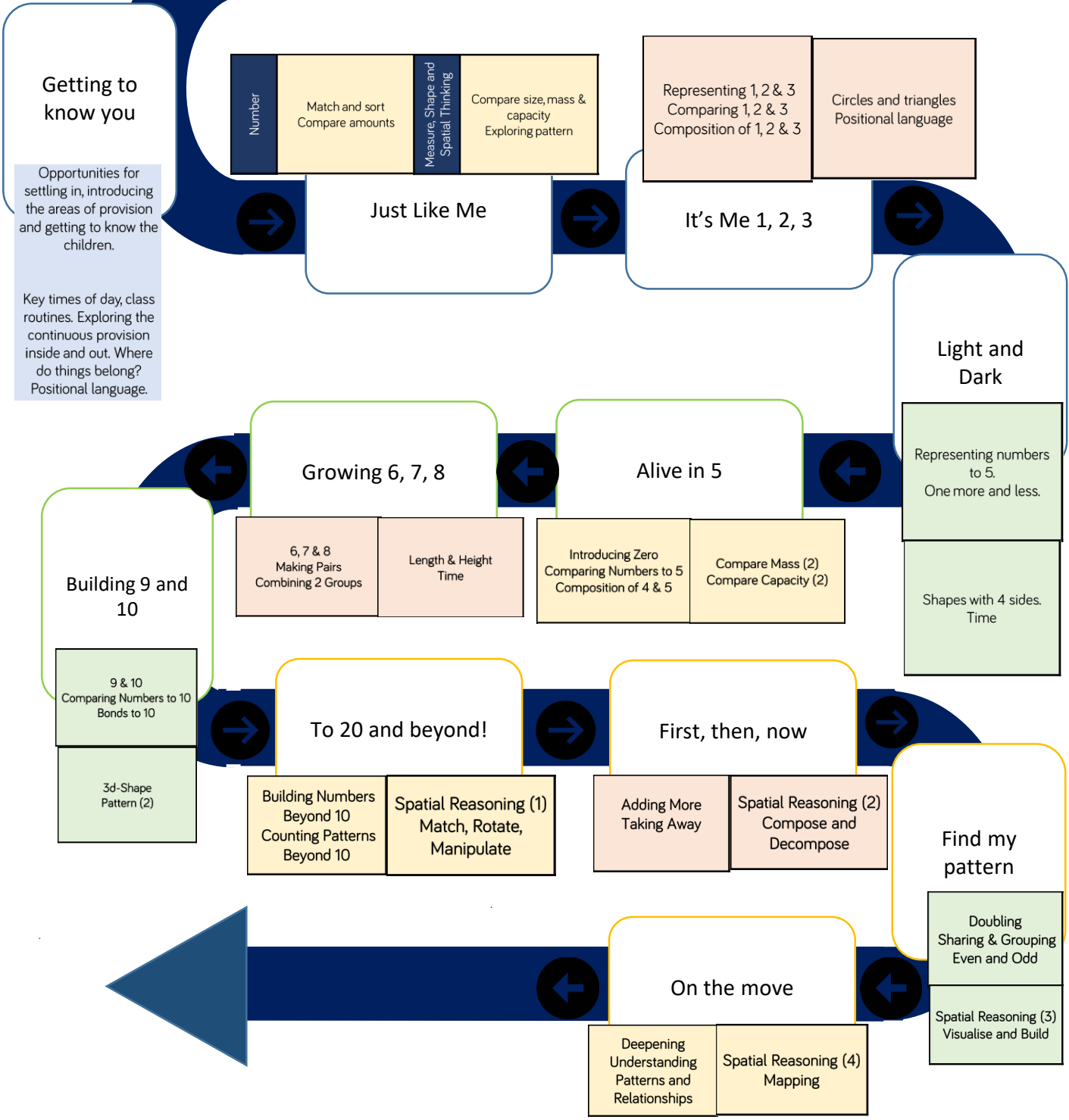


EYFS Maths' Pathway (WRM)



New

Number and Place Value	Addition and Subtraction	Multiplication and Division	Measure	Geometry (position and direction)	Geometry (Properties of shape)	Fractions	General/problem solving.
Number	Number line	Odd, even	Full, half, empty	Over, under, underneath, above, below, top, bottom, side	Sort	Whole	Listen, join in
One, two, three to twenty and beyond.	Add, more, plus, make, sum, total, altogether	Double, halve	Holds	On, in, outside, inside	Cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square	Equal	Say, think, imagine, remember
None	Double	Share, share equally	Container	In front, behind	Shape	One half	Start from
Count on/up/to/from/down	Half, halve	Group in pairs	Weigh, weighs, balance	Front, back	Flat, curved, straight, round		Look at, point to
Before, after	Equals, is the same (including equals sign)	Equal groups of	Heavy, heavier, heaviest, light, lighter, lightest	Before, after	Solid		Put
More, less, many, few, fewer, fewest, smaller, smallest	How many more to make...? How many more is... then...? How much more is...?	Divide	Scales	Beside, next to	Corner		What comes next?
Equal to, the same as			Time	Middle	Face, side		Find, use, make, build
Odd, even			Days of the week: Monday, Tuesday etc.	Up, down, forwards, backwards, Sideways	Make, build, draw		Tell me, describe, pick out, talk about, explain, show me
Digit	Subtract, take away, minus.		Seasons: Spring, Summer, Autumn, Winter	Close, far			Read, write
Numeral			Days, week, month, year, weekend	Through			Tick, draw a line, ring
Compare			Birthday, holiday	Towards, away from			Cost
Order			Morning, afternoon, evening, night	Side, roll, turn			Count, work out
Size			Bedtime,				Number line, number track, number square, number cards

Year 1 Spring Pathway

Spring term	Number Place value (within 20)	Number Addition and subtraction (within 20)	Number Place value (within 50)	Measurement Length and height	Measurement Mass and volume
	VIEW	VIEW	VIEW	VIEW	VIEW

Place value within 20



Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least

Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s

Read and write numbers from 1 to 20 in numerals and words

Given a number, identify 1 more and 1 less

Assessment:
Test:



Place value within 50

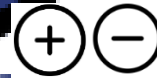
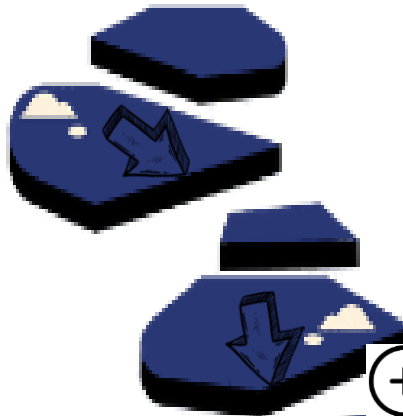
Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least

Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s

Given a number, identify 1 more and 1 less

Assessment:
Test:



Addition and Subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

Add and subtract 1-digit and 2-digit numbers to 20, including zero

Represent and use number bonds and related subtraction facts within 20

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$

Assessment:
Test:

Measures



Compare, describe and solve practical problems for: lengths and height; mass/weight; capacity and volume; time

Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time

Assessment:
Test:

Number and Place value	Addition and Subtraction	Multiplication and division	Measure	Position and direction	Shape	Fractions	Problem solving
Zero, one, two, three to twenty and beyond	Number bonds, number line	Odd, even	Full, half, empty	Over, under, underneath, above, below, top, bottom	Group, sort	Whole	Say
None	Add, more, plus, make, sum, total, altogether	How many times	Holds	On, in, outside, inside	Cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square	Equal	Think
Count on/up/to/down/From	Inverse	Lots of, groups of	Container	Around, in front, behind	Shape	Parts	Start from, start with
Before/less	Equals	Multiply, multiple of	Weigh, balances	Front, back, before, after	Flat, curved, straight, round	Four equal parts	Look at, point to, place
Many, fewer, least, smallest, greatest,	Difference between,	Repeated addition,	Heavy, heavier, heaviest	Beside, next to, opposite, apart	Hollow, solid	One half, two halves	Arrange, rearrange
Equal to, same as	How many more make...? How much more is...?	Array, row	Light, lighter, lightest	Left, right, up, down, forwards, backwards	Corner	A quarter	What comes next?
Odd, even	Share, share equally	Double, halve	Days of the week Seasons	Along, through	Face, side, edge	Two quarters	Carry on, continue, repeat
Units, ones, tens	Equal groups of	Divide, divided by, left over	Day, week, month, year, weekend	Slide, roll, turn,			Find, choose, collect
Compare	Subtract, take away, minus		Morning, afternoon, evening	Whole turn, half turn			Shade, colour, record
Value	How many fewer is...? How much less is...?		Hour, o'clock, half past				Describe Explain Prove it

Year 2 Pathway Autumn

Spring term	Measurement Money VIEW	Number Multiplication and division VIEW	Measurement Length and height VIEW	Measurement Mass, capacity and temperature VIEW
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Money



Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Assessment:
Test:

Multiplication and division



Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Assessment:
Test:

Measures-Length and height



Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels

Compare and order lengths, mass, volume/capacity and record the results using >, < and =

Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Assessment:
Test:

Measures-Mass, capacity and temperature



Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

Compare and order lengths, mass, volume/capacity and record the results using >, < and =

Number and Place value	Addition and Subtraction	Multiplication and division	Measure	Position and direction	Shape	Fractions	Problem solving
Numbers to 100	Number bonds, number line	Odd, even	Quarter past	Rotation	Size	Three quarters	Predict
Hundreds	Add, more, plus, make, sum, total, altogether	How many times	Quarter to	Clockwise	Bigger, smaller, larger	One third, a third	Describe the pattern
Partition	Inverse	Lots of, groups of	Km, m	Anti clockwise	Symmetrical, line of symmetry	Equivalence	Describe the rule
Recombine	Equals	Multiply, multiple of	Kg, g	Straight line	Fold	Equivalent to	Find, find all
Hundred more, less	Difference between,	Repeated addition,	MI, I	Ninety degree turn	Match		Investigate
Equal to, same as	How many more make...? How much more is...?	Array, row	Temperature	Right angle	Mirror line, reflection,		Describe Explain Prove it
Odd, even	Subtract, take away, minus	Double, halve	degrees		Pattern, repeating pattern,		
Units, ones, tens	How many fewer is...? How much less is...?	Share, share equally	Holds				
Compare		Equal groups of	Container				
Value		Divide, divided by, left over	Weigh, balances				
			Heavy, heavier, heaviest				

Year 3 Spring Pathway

Spring term	Number Multiplication and division B VIEW	Measurement Length and perimeter VIEW	Number Fractions A VIEW	Measurement Mass and capacity VIEW
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Multiplication and division

Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2)

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods

Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Assessment:
Test:

Measures-Length and Perimeter

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Measure the perimeter of simple 2-D shapes

Assessment:
Test:

Fractions

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators

Compare and order unit fractions, and fractions with the same denominators

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

Recognise and show, using diagrams, equivalent fractions with small denominators

Assessment:
Test:

Measures-Mass and Capacity

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Assessment:
Test:

Number and Place value	Addition and Subtraction	Multiplication and division	Measure	Position and direction	Shape	Fractions	Data/Statistics
Numbers to 1000	Column addition, Column subtraction,	Product	Twelve/twenty four hour clock	Greater, less than	Horizontal,	Numerator	Chart
Partition	Inverse	Multiples of...	Am, pm	Ninety degrees	Vertical	Denominator	Bar chart
Recombine	Equals	Scale up	Roman numerals I to XIII	Orientation,	Perpendicular lines	Unit fraction, non unit fraction	Frequency table
Hundred more, less	Difference between,	Multiply, multiple of		Same orientation	Parallel lines	Compare and order	Carroll diagram
Equal to, same as	How many more make...?	Repeated addition,		Different orientation		Tenths	Venn diagram
Odd, even	How much more is...?	Array, row					Axis
Compare	Subtract, take away, minus	Share, share equally					Diagram
Value	How many fewer is...?	Equal groups of					
	How much less is...?	Divide, divided by, left over					

Year 4 Spring Pathway

Spring term	Number Multiplication and division B VIEW	Measurement Length and perimeter VIEW	Number Fractions VIEW	Number Decimals A VIEW
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Multiplication and division



Recognise and use factor pairs and commutativity in mental calculations

Recall multiplication and division facts for multiplication tables up to 12×12

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5)

Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers

Assessment:
Test:

Fractions



Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3)

Recognise and show, using diagrams, families of common equivalent fractions

Add and subtract fractions with the same denominator

Assessment:
Test:

Measures-Length and Perimeter

Convert between different units of measure [for example, kilometre to metre; hour to minute]

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

Assessment:
Test:

Decimals



Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3)

Recognise and write decimal equivalents of any number of tenths or hundredths

Compare numbers with the same number of decimal places up to 2 decimal places

Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths

Recognise and show, using diagrams, families of common equivalent fractions

Assessment:
Test:

Number and Place value	Multiplication and division	Measure	Position and direction	Shape	Fractions	Data/Statistics
Tenths, hundredths, decimal places	Multiplication facts (up to 12×12)	Convert	Co-ordinates	Quadrilaterals	Equivalent decimals and fractions	Continuous data
Round (to nearest)	Division facts		Translation	Triangles		Line graph
Thousand more, thousand less	Inverse		Quadrant	Right angle		
Negative integers	Derive		X axis Y axis	Acute and obtuse angles		
Count through zero			Perimeter and area			
Roman Numerals (I to C)						

Year 5 Spring Pathway

Spring term	Number Multiplication and division B VIEW	Number Fractions B VIEW	Number Decimals and percentages VIEW	Measurement Perimeter and area VIEW	Statistics VIEW
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Multiplication and division



Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers

Divide up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context

Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes

Assessment:

Test:

Decimals and Percentages



Read, write, order and compare numbers with up to 3 decimal places

Read and write decimal numbers as fractions

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

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

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

Solve problems involving numbers up to 3 decimal places

Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place

Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction

Assessment:

Test:

Perimeter and Area



Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes

Assessment:

Test:

Statistics



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

Complete, read and interpret information in tables, including timetables

Assessment:

Test:

Number and Place value	Multiplication and division	Measure	Position and direction	Shape	Fractions
Powers of ten	Efficient written method Factor pairs Composite, prime, prime factor, square numbers, cubed numbers Formal written method	Volume Imperial measures/units Metric measures/units	Reflex angles Dimensions	Regular and irregular polygons	Proper fraction, improper fractions, mixed numbers Percentage Half Quarter Fifths Ratio and proportion

Year 6 Spring Pathway

Spring term	Number Ratio VIEW	Number Algebra VIEW	Number Decimals VIEW	Number Fractions decimals and percentages VIEW	Measurement Area, perimeter and volume VIEW	Statistics 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 (cm^3) and cubic metres (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