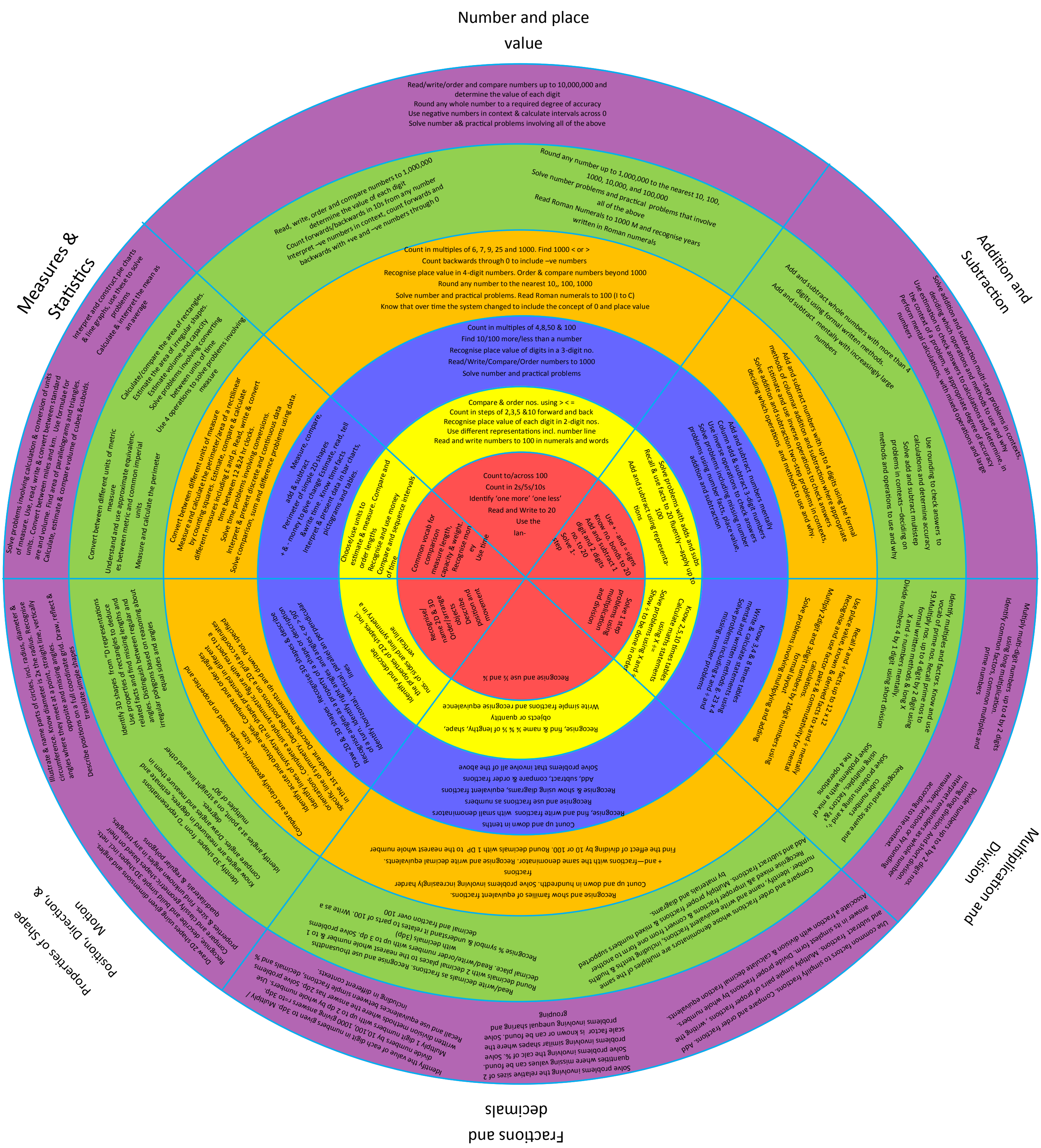

Number and place value
Read/write/order and compare numbers up to 10,000,000 and determine the value of each digit
Round any whole number to a required degree of accuracy
Use negative numbers in context & calculate intervals across 0
Solve number a& practical problems involving all of the above
Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000, and 100,000
Solve number problems and practical problems that involve all of the above
Read Roman Numerals to 1000 M and recognise years written in Roman numerals
Read, write, order and compare numbers to 1,000,000 determine the value of each digit
Count forwards/backwards in 10s from any number
Interpret –ve numbers in context, count forwards and backwards with +ve and –ve numbers through 0
Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 < or >
Count backwards through 0 to include –ve numbers
Recognise place value in 4-digit numbers. Order & compare numbers beyond 1000
Round any number to the nearest 10,, 100, 1000
Solve number and practical problems. Read Roman numerals to 100 (I to C)
Know that over time the system changed to include the concept of 0 and place value
Count in multiples of 4,8,50 & 100
Find 10/100 more/less than a number
Recognise place value of digits in a 3-digit no.
Read/Write/Compare/Order numbers to 1000
Solve number and practical problems
Compare & order nos. using > < =
Count in steps of 2,3,5 &10 forward and back
Recognise place value of each digit in 2-digit nos.
Use different representations incl. number line
Read and write numbers to 100 in numerals and words
Count to/across 100
Count in 2s/5s/10s
Identify 'one more' 'one less'
Read and Write to 20
Use the lan-
Addition and Subtraction
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
Perform mental calculations, with mixed operations and large numbers
Add and subtract whole numbers with more than 4 digits using formal written methods.
Add and subtract mentally with increasingly large numbers
Use rounding to check answers to calculations and determine accuracy
Solve add and subtract multistep problems in contexts—deciding on methods and operations to use and why
Add and subtract numbers with up to 4 digits using the formal methods of columnar addition and subtraction where appropriate
Estimate and use inverse operations to check answers
Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
Add and subtract numbers mentally
Column add & subtract 3-digit numbers
Use inverse operations to check answers
Solve problems including missing number problems using number facts, place value, addition and subtraction
Solve problems with adds and subs
Recall & use facts to 20 fluently—apply up to 100
Add and subtract using representations
Use + and = signs
Know no. bonds to 20
Add and subtract 1 digit and 2 digits no. to 20
Solve 1-step
Multiplication and Division
Identify multiples and factors. Know and use vocab of prime nos. Recall prime nos to 19.Multiply nos. up to 4 digit by 2 digit using formal written methods & long X
Divide numbers 4 by 1 digit using short division
Multiply multi-digit numbers up to 4 by 2 digits using long multiplication.
Identify common factors, common multiples and prime numbers
Divide numbers up to 4 by 2 digit no. using long division, interpret remainders
Recall X and ÷ facts up to 12 x 12
Use place value, known & derived facts to X and ÷ mentally
Multiply 2digit and 3digit numbers by 1digit number using formal layout
Recognise and use factor pairs & commutativity in mental calculations
Solve problems involving multiplying and adding
Recognise and use square and cube numbers
Solve problems using X and ÷ using factors & multiples
Know 3,4 & 8 times tables
Write & calculate mental and written statements
Solve problems incl. missing number problems
Know 2,5,10 times tables
Calculate maths statements using X and ÷
Solve problems using X and ÷
Show X to be done in order
Solve 1 step problems using multiplication and division
Fractions and decimals
Solve problems involving the relative sizes of 2 quantities where missing values can be found
Solve problems involving the calc of %. Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping
Use common factors to simplify fractions. Compare and order fractions. Add and subtract fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form. Divide proper fractions by whole numbers. Associate a fraction with division & calculate decimal fraction equivalents.
Identify the value of each digit in numbers given to 3dp. Multiply / divide numbers by 10,100, 1000 giving answers to 3dp. Multiply 1 digit numbers with up to 2 dp by whole numbers. Use written division methods where the answer has 2dp. Solve problems which require answers to be rounded. Recall and use equivalences between simple fractions, decimals and % including in different contexts.
Compare and order fractions whose denominators are multiples of the same number. Identify, name and write equivalent fractions. Recognise mixed numbers and improper fractions & convert from one to another. Add and subtract fractions. Multiply proper fractions, including tenths & hundreths supported by materials and diagrams.
Read/write decimals with 2 decimal places as fractions. Round decimals with 2 decimal places to the nearest whole number & to 1 decimal place. Read/write/order numbers with up to 3 dp. Solve problems with decimals (3dp). Recognise and use thousandths & understand it relates to parts of 100. Write as a decimal and fraction over 100
Recognise % symbol & understand
Recognise and show families of equivalent fractions.
Count up and down in hundredths. Solve problems involving increasingly harder fractions
+ and—fractions with the same denominator. Recognise and write decimal equivalents.
Find the effect of dividing by 10 or 100. Round decimals with 1 DP to the nearest whole number
Count up and down in tenths
Recognise, find and write fractions with small denominators
Recognise and use fractions as numbers
Recognise & show using diagrams, equivalent fractions
Add, subtract, compare & order fractions
Solve problems that involve all of the above
Recognise, find & name ½ ⅓ ¼ of lengthy, shape, objects or quantity
Write simple fractions and recognise equivalence
Recognise and use ½ and ¼
Properties of Shape Position, Direction, & Motion
Illustrate & name parts of circles, incl. radius, diameter & circumference. Know diameter is 2x the radius. Recognise angles where they meet at a point, straight line, vertically opposite and missing angles. Draw, reflect & translate simple shapes. Describe positions on a full coordinate grid
Draw 2D shapes using given dimensions and angles. Recognise, describe and build simple 3D shapes incl. nets. Compare & classify geometric shapes based on their properties & sizes. Find unknown angles in any triangles, quadrilaterals & regular polygons
Identify 3D shapes from 2D representations. Know angles are measured in degrees, estimate and compare angles. Draw angles and measure them in degrees. Identify angles at a point on a straight line and other multiples of 90
Identify 3D shapes from 2D representations to deduce related facts. Use properties of rectangles, lengths and angles. Distinguish based on reasoning about regular and irregular polygons
Compare and classify geometric shapes based on properties and sizes. Identify acute and obtuse angles. Compare and order angles. Identify lines of symmetry in 2D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry. Describe positions on a 2D grid as coordinates in the 1st quadrant. Describe movements
Draw 2D & 3D shapes. Recognise 3D shapes & describe angles as a property of shape or description of a turn. Identify horizontal, vertical, parallel and perpendicular lines
Identify and describe the properties of 2D shapes, incl. nos. of sides and line symmetry in a vertical line
Recognise/name 2D & 3D shapes
Describe position and movement
Measures & Statistics
Interpret and construct pie charts & line graphs, use these to solve problems
Calculate & interpret the mean as an average
Solve problems involving calculation & conversion of units of measure. Use, read, write & convert between standard units. Convert between miles and km. Use formulae for area and volume. Find area of parallelograms and triangles. Calculate, estimate & compare volume of cubes &cuboids.
Calculate/compare the area of rectangles. Estimate the area of irregular shapes. Estimate volume and capacity
Solve problems involving converting between units of time
Use 4 operations to solve problems involving measure
Convert between different units of metric measure
Understand and use approximate equivalences between metric and common imperial units
Measure and calculate the perimeter
Convert between different units of measure
Measure and calculate the perimeter/area of a rectilinear by counting squares. Estimate, compare & calculate different measures including £ and p. Read, write & convert time between 12 & 24 hr clocks.
Solve time problems involving conversions.
Interpret & present discrete and continuous data
Solve comparison, sum and difference problems using data.
Measure, compare, add & subtract
Perimeter of simple 2D shapes
+ & - money to give change Estimate, read, tell &write time. Know time facts
Interpret & present data in bar charts, pictograms and tables.
Choose/use units to estimate & measure. Compare and order lengths
Recognise and use money
Compare and sequence intervals of time
Common vocab for comparison measure length, capacity & weight
Recognise money
Use time