MATHS : CURRICULUM CONTENT AND PROGRESSION FRAMEWORK

'Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers.' – Shakuntala Devi

Aims
The national curriculum for maths aims to ensure that all pupils:
- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

We believe that maths is the foundation for understanding the world and is key to the future success of all of our children. We want children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We believe all children can achieve in maths, and teach for secure and deep understanding of mathematical concepts through manageable steps. As our pupils learn, we aim to give them an appreciation of the beauty and power of mathematics, and for them to leave our school as confident mathematical learners.

At Kirk Fenton we follow the White Rose schemes of learning. These are designed to support a mastery approach to teaching and learning, as well as to support the aims and objectives of the National Curriculum. The White Rose schemes have number at the heart and a lot of time is spent reinforcing number to build competency. It also provides opportunities to build reasoning and problem solving into each lesson. Using this approach, all children who are introduced to a concept have the opportunity to build on their abilities by following a concrete-pictorial-abstract approach.

FOUNDATION

Curriculum Content:

Number and Place Value:
- Count up to three or four objects by saying a number name for each item
- Count actions or objects which cannot be moved
- Count objects to 10 and begin to count beyond 10
- Count out up to six objects from a larger group
- Count an irregular arrangement of up to ten objects
- ELG - count reliably with numbers from one to 20
- Use the language of 'more' and 'fewer' to compare two sets of objects
- ELG - with numbers from one to 20, place them in order
- Say the number that is one more than a given number
- ELG - with numbers from 1 to 20 say which number is one more or less than a given number
- Select the correct numeral to represent 1 to 5, then 1 to 10 objects.
- Estimate how many objects they can see and check by counting them.
- Recognise some numerals of personal significance
- Recognise numerals 1 to 5

Addition and Subtraction:
- Find the total number of items in two groups by counting all of them
- In practical activities and discussion, begin to use the vocabulary involved in adding and subtracting
- Record, using marks that they can interpret and explain
- ELG - using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer
- Begin to identify their own mathematical problems based on own interests and fascinations

Multiplication and Division:
ELG - they solve problems, including doubling, halving and sharing

Measurement:
- Order two or three items by length or height
- Order two items by weight or capacity
- Order and sequence familiar events
- Measure short periods of time in simple ways
- ELG - children use everyday language to talk about time

Geometry:
- Use familiar objects and common shapes to create and recreate patterns

- ELG - They recognise, create and describe patterns
- Begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes
- ELG - They explore characteristics of everyday objects and shapes and use mathematical language to describe them
- Use familiar objects and common shapes to create and recreate patterns and build models

YEAR 1

Curriculum Content:

Number and Place Value:
- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- Given a number, identify one more and one less
- Use the language of: equal to, more than, less than (fewer), most, least
- Identify and represent numbers using objects and pictorial representations including the number line
- Read and write numbers from 1 to 20 in numerals and words

Addition and Subtraction:
- Represent and use number bonds and related subtraction facts within 20
- Add and subtract one-digit and two-digit numbers to 20, including zero
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9

Multiplication and Division:
- Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher
- Fractions, Decimals and Percentages:
- Recognise, find and name a half as one of two equal parts of an object, shape or quantity
- Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity

Measurement:
- Compare, describe and solve practical problems for:
- lengths & heights [e.g. long/short, longer/shorter, tall/short, double/half]
- mass/weight [e.g. heavy/light, heavier than, lighter than]
- capacity & volume [e.g. full/empty, more than, less than, half, half full, quarter]
- time [e.g. quicker, slower, earlier, later]

- Sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- Measure and begin to record the following:
- lengths and heights
- mass/weight
- capacity and volume
- time (hours, minutes, seconds)
- Recognise and know the value of different denominations of coins and notes

Geometry:
- Recognise and name common 2D and 3D shapes, including:
- 2D shapes [e.g. rectangles (including squares), circles and triangles]
- 3D shapes [e.g. cuboids (including cubes), pyramids and spheres]
- Describe position, direction and movement, including half, quarter and three-quarter turns

YEAR 2

Curriculum Content:

Number and Place Value:
- Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward
- Compare and order numbers from 0 up to 100; use <, > and = signs
- Compare and order numbers from 0 up to 100; use <, > and = signs
- Identify, represent and estimate numbers using different representations, including the number line
- Read and write numbers to at least 100 in numerals and in words
- Recognise the place value of each digit in a two-digit number (tens, ones)
- Use place value and number facts to solve problems

Addition and Subtraction:
- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers
- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and
- solve missing number problems

- Solve problems with addition and subtraction:
- using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of mental and written methods

Multiplication and Division:
- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Fractions, Decimals and Percentages:
- Recognise, find, name and write fractions ⅓, ¼, ²/₄ and ¾ of a length, shape, set of objects or quantity
- Write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of ²/₄ and ½
- Write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Measurement:
- Compare and order lengths, mass, volume/capacity and record the results using >, < and =
- Compare and sequence intervals of time
- 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
- Find different combinations of coins that equal the same amounts of 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.
- Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- Know the number of minutes in an hour and the number of hours in a day

Geometry:
- Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line
- Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces
- Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- Compare and sort common 2D and 3D shapes and everyday objects

- Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
- Order and arrange combinations of mathematical objects in patterns and sequences

Statistics:
- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- Ask and answer questions about totalling and comparing categorical data

YEAR 3

Curriculum Content:

Number and Place Value:
- Count from 0 in multiples of 4, 8, 50 and 100
- Find 10 or 100 more or less than a given number
- Compare and order numbers up to 1000
- Compare and order numbers up to 1000
- Read and write numbers up to 1000 in numerals and in words
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- Solve number problems and practical problems involving these ideas

Addition and Subtraction:
- Add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- Estimate the answer to a calculation and use inverse operations to check answers
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Multiplication and Division:
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Written Methods)
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Mental Methods)
- Estimate and use inverse operations to check answers to a calculation

- 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

Fractions, Decimals and Percentages:
- Count up and down in tenths
- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- Compare and order unit fractions, and fractions with the same denominators
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Add and subtract fractions with the same denominator within one whole (e.g. 5/7 + 1/7 = 6/7)
- Solve problems that involve all of the above

Measurement:
- Compare durations of events, for example to calculate the time taken by particular events or tasks
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)
- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2D shapes
- Add and subtract amounts of money to give change, using both £ and p in practical contexts
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- Know the number of seconds in a minute and the number of days in each month, year and leap year

Geometry:
- Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them
- Recognise angles as a property of shape or a description of a turn
- Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Statistics:
- Interpret and present data using bar charts, pictograms and tables
- Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables

YEAR 4
Curriculum Content:

Number and Place Value:
- Count backwards through zero to include negative numbers
- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more or less than a given number
- Order and compare numbers beyond 1000
- Identify, represent and estimate numbers using different representations
- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Round any number to the nearest 10, 100 or 1000
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers

Addition and Subtraction:
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

Multiplication and Division:
- Recall multiplication and division facts for multiplication tables up to 12x12
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutativity in mental calculations
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Recognise and use factor pairs and commutativity in mental calculations (appears also in Mental Calculation)
- Estimate and use inverse operations to check answers to a calculation
- Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

Fractions, Decimals and Percentages:
- Count up and down in hundredths
- Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
- Compare numbers with the same number of decimal places up to two decimal places
- Round decimals with one decimal place to the nearest whole number
- Recognise and show, using diagrams, families of common equivalent fractions

- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise and write decimal equivalents to ¼; ½; ¾
- Add and subtract fractions with the same denominator
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- Solve simple measure and money problems involving fractions and decimals to two decimal places

Measurement:
- Estimate, compare and calculate different measures, including money in pounds and pence (appears also in Measuring)
- Estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing)
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- Find the area of rectilinear shapes by counting squares
- Read, write and convert time between analogue and digital 12- and 24-hour clocks
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
- Convert between different units of measure (e.g. kilometre to metre; hour to minute)
- Read, write and convert time between analogue and digital 12- and 24-hour clocks
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

Geometry:
- Identify lines of symmetry in 2D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Describe positions on a 2D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon

Statistics:
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

YEAR 5

Curriculum Content:

Number and Place Value:
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- Count forwards or backwards in steps of powers of 10 for any given number up to 1000000
- Read, write, order and compare numbers to at least 1000000 and determine the value of each digit (appears also in Reading and Writing Numbers)
- Read, write, order and compare numbers to at least 1000000 and determine the value of each digit (appears also in Comparing Numbers)
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals
- Read, write, order and compare numbers to at least 1000000 and determine the value of each digit
- Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000
- Solve number problems and practical problems that involve all of the above

Addition and Subtraction:
- Add and subtract numbers mentally with increasingly large numbers
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Multiplication and Division:
- Multiply and divide numbers mentally drawing upon known facts
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates

Fractions, Decimals and Percentages:
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalent (appears also in Equivalence)

- Compare and order fractions whose denominators are all multiples of the same number
- Read, write, order and compare numbers with up to three decimal places
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$)
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 1 1/5)
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Solve problems involving numbers up to three decimal places
- Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25

Measurement:
- Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes (appears also in Measuring)
- Estimate volume (e.g. using 1cm³ blocks to build cubes and cuboids) and capacity (e.g. using water)
- Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes
- Solve problems involving converting between units of time
- Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Geometry:
- Identify 3D shapes, including cubes and other cuboids, from 2D representations
- Draw given angles, and measure them in degrees (°)
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles
- Identify:

- angles at a point and one whole turn (total 360°)
- angles at a point on a straight line and ½ a turn (total 180°)
- other multiples of 90°
  - Use the properties of rectangles to deduce related facts and find missing lengths and angles

Statistics:
  - Complete, read and interpret information in tables, including timetables
Solve comparison, sum and difference problems using information presented in a line graph

YEAR 6

Curriculum Content:

Number and Place Value:
  - Use negative numbers in context, and calculate intervals across zero
  - Read, write, order and compare numbers up to 10000000 and determine the value of each digit (appears also in Reading and Writing Numbers)
  - Read, write, order and compare numbers up to 10000000 and determine the value of each digit (appears also in Understanding Place Value)
  - Read, write, order and compare numbers up to 10000000 and determine the value of each digit
  - Round any whole number to a required degree of accuracy
  - Solve number and practical problems that involve all of the above

Addition and Subtraction:
  - Perform mental calculations, including with mixed operations and large numbers
  - Use their knowledge of the order of operations to carry out calculations involving the four operations
  - Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
  - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Multiplication and Division:
  - Perform mental calculations, including with mixed operations and large numbers
  - Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
  - Divide numbers up to 4 digits by a two-digit whole number using the formal written method of short division where appropriate for the context
  - Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
  - Identify common factors, common multiples and prime numbers
  - Use their knowledge of the order of operations to carry out calculations involving the four operations
  - Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
  - 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 the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

- Solve problems involving similar shapes where the scale factor is known or can be found
- Solve problems involving addition, subtraction, multiplication and division.

Fractions, Decimals and Percentages:
- Compare and order fractions, including fractions >1
- Identify the value of each digit in numbers given to three decimal places
- Solve problems which require answers to be rounded to specified degrees of accuracy
- 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 (e.g. 0.375) for a simple fraction (e.g. ⅜)
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1/4 x 1/2 = 1/8); multiply one-digit numbers with up to two decimal places by whole numbers
- Divide proper fractions by whole numbers (e.g. 1/3 ÷ 2 = 1/6)
- Multiply one-digit numbers with up to two decimal places by whole numbers
- Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
- Use written division methods in cases where the answer has up to two decimal places
- Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.

Algebra:
- Express missing number problems algebraically
- Find pairs of numbers that satisfy number sentences involving two unknowns
- Enumerate all possibilities of combinations of two variables
- Use simple formulae
- Generate and describe linear number sequences

Measurement:
- 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 such as mm³ and km³
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Converting)
- Recognise that shapes with the same areas can have different perimeters and vice versa
- Calculate the area of parallelograms and triangles
- 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 (m �), and extending to other units [e.g. mm � and km �].

- Recognise when it is possible to use formulae for area and volume of shapes

Geometry:
- Recognise, describe and build simple 3D shapes, including making nets
- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
- Draw 2D shapes using given dimensions and angles
- Recognise, describe and build simple 3D shapes, including making nets (appears also in Identifying Shapes and their Properties)
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- Describe positions on the full coordinate grid (all four quadrants)
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

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