YEAR 4 MATHS

1 Number and Place Value

- Solve number and practical problems that involve all of the following and with increasingly large positive numbers
- Count in multiples of 25 and 1000
- Find 1000 more or less than a given number
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Identify, represent and estimate numbers using different representations
- Round any number to the nearest 10, 100
- Count in multiples of 6, 25 and 1000
- Order and compare numbers beyond 1000
- Count backwards through zero to include negative numbers
- Round any number to the nearest 10, 100 or 1000
- 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.

2 Addition and Subtraction (including Statistics)

- 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.
- Add and subtract numbers with up to 4 digits
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Statistics: Solve comparison sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

3 Multiplication and Division

- Use place value, known and derived facts to multiply and divide mentally
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit,
- Recall 2/3/4/5/6/8 multiplication and division facts for multiplication tables
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1;
- Recall multiplication and division facts for multiplication tables up to 12 × 12
- 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 two-digit and three-digit numbers by a one-digit number using formal written layout
- 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.

4 Fractions

- Recognise and show fractions, using diagrams eg fractions walls and number lines
- Find the effect of dividing a one- or two-digit number by 10 and 100,
- Solve simple measure and money problems involving fractions
- Add and subtract fractions with the same denominator
- Round decimals with one decimal place to the nearest whole number
- Recognise and show, using diagrams, families of common equivalent fractions
- Recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.
- 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
- Count up and down in hundredths
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise and write decimal equivalents to 1/4; 1/2; 3/4
- Identifying the value of the digits in the answer as ones, tenths and hundredths
- Compare numbers with the same number of decimal places up to two decimal places
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

5   Measurement

- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- Solve simple measure and money problems involving fractions
- Estimate, compare and calculate different measures, including money in pounds and pence
- 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.

6 Geometry

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