# Ravensfield Maths Curriculum Year 4

## Number and Place Value

- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more or less than a given number
- Count backwards through zero to include negative numbers
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Order and compare numbers beyond 1000
- Identify, represent and estimate numbers using different representations
- 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
- 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.

## 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 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.

## Fractions (including decimals)

- Recognise and show, using diagrams, families of common equivalent fractions
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise and write decimal equivalents to ¼, ½, ¾
- 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
- Round decimals with one decimal place to the nearest whole number
- 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.

## Measures

- 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

- Find the area of rectilinear shapes by counting squares
- Estimate, compare and calculate different measures, including money in pounds and pence

### Geometry – Properties of shape

- 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 lines of symmetry in 2-D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry.

### Geometry – position and direction

- Describe positions on a 2-D grid as coordinates in the first quadrant
- Describe movements between positions as translations of a given unit to the left/right and up/down
- 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.

# Daily Skills Progression

## (Number expectations from the new curriculum 2014)

Year 3
- Count from 0 in multiples of 4, 8, 50 and 100
- Count 10 more or 10 less from any given number
- Count 100 more or less from any given number
- Know multiples of 2,3,4,5,8,10,50 and 100
- Compliments to 100. E.g 31+69
- Compliments to 100 with multiples of 100 (eg 300 + 700)
- Read any unit or non-unit fraction less than 1.
- Count in fractions of ½ , ¼ and 1/10 from any number
- Know number facts for all numbers to 20
- Doubles of all numbers to 100 with one's digit 5 or less and know corresponding halves (eg double 43, half of 72, half of 44)
- Reinforce doubles and halves of all multiples of 10 and 100
- Recognise any odd or even number

Year 4
- Count in multiples of 6,7,9,25 and 1000
- Count backwards through zero to include negative numbers
- Round numbers to the nearest 10, 100, 1000
- Know all multiplication facts to 12x12
- Count up and down in 1/5, 1/100's
- Know factor pairs for known multiplication facts.
- Pairs of fractions that total 1 (with the same denominator)
- Decimal compliments to 1 (1 dp, for example, 0.3 + 0.7)
- Fraction/decimal equivalents of one half, quarters, tenths and hundredths (eg 0.3 = 3/10, 3/100 = 0.03).
- Revise doubles of multiples of 10 and 100 and corresponding halves.
- Know what number must be added to any 3 digit number to make the next multiple of 10 0( eg, 345 + 55 = 400)