## **Mathematics Curriculum**

## Year 1

#### Number/Calculation

- Count to / across 100
- Count in 1s, 2s, 5s and 10s
- Identify 'one more' and 'one less'
- Read & write numbers
   to 20
- Use language, e.g. 'more than', 'most'
- Use +, and = symbols
- Know number bonds to 20
- add and subtract onedigit and two-digit numbers to 20, including zero
- Solve one-step problems, including simple arrays

#### Geometry & Measures

- Use common vocabulary for comparison, e.g. heavier, taller, full, longest, quickest
- Begin to measure length, capacity, weight
- Recognise coins & notes
- Use time & ordering
- vocabulary
  Tell the time to hour/halfhour
- Use language of days, weeks, months & years
- Recognise & name common 2-d and 3-d shapes
- Order & arrange objects

 Describe position & movement, including half and guarter turns

#### Fractions

 Recognise & use ½ & ¼

## Year 2

#### Number/Calculation

- Know 2, 5, 10x tables
- Begin to use place
- value (T/U) • Count in 2s, 3s, 5s & 10s
- Identify, represent & estimate numbers
- Compare / order numbers, inc. < > =
- Write numbers to 100
- Know number facts to 20 (+ related to 100)
- Use x and ÷ symbols
- Recognise
   commutative property
   of multiplication

#### **Geometry & Measures**

- Know and use standard measures
- Read scales to nearest whole unit
- Use symbols for £ and p and add/subtract simple sums of less than £1 or in pounds
- Tell time to the nearest 5 minutes
- Identify & sort 2-d & 3-d shapes
- Identify 2-d shapes on 3-d surfaces
- Order and arrange mathematical objects
- Use terminology of position & movement

#### Fractions

- Find and write simple fractions
- Understand equivalence of e.g. 2/4 = 1/2

#### Data

- Interpret simple tables & pictograms
- Ask & answer comparison questions
- Ask & answer questions about totalling

## Year 3

#### Number/Calculation

- Learn 3, 4 & 8x tables
- Secure place value to 100
- Mentally add & subtract units, tens or hundreds to numbers of up to 3 digits
- Written column addition
   & subtraction
- Solve number problems, including multiplication & simple division and missing number problems
- Use commutativity to help calculations

#### Geometry & Measures

- Measure & calculate
   with metric measures
  - Measure simple perimeter
- Add/subtract using money in context
- Use Roman numerals up to XII; tell time
- Calculate using simple time problems
- Draw 2-d / Make 3-d shapes
- Identify and use right angles
- Identify horizontal, vertical, perpendicular and parallel lines

#### Fractions & decimals

- Use & count in tenths
- Recognise, find & write fractions
- Recognise some equivalent fractions
- Add/subtract fractions up to <1</li>
- Order fractions with common denominator

#### Data

Interpret bar charts & pictograms

## Year 4

#### Number/Calculation

- Know all tables to 12 x 12
- Secure place value to 1000
- Use negative whole
   numbers
- Round numbers to nearest 10, 100 or 1000
- Use Roman numerals to 100 (C)
- Column addition & subtraction up to 4 digits
- Multiply & divide mentally
- Use standard short
   multiplication

#### Geometry & Measures

- Compare 2-d shapes, including quadrilaterals & triangles
- Find area by counting squares
- Calculate rectangle
   perimeters
- Estimate & calculate measures
- Identify acute, obtuse & right angles
- Identify symmetry
- Use first quadrant coordinates
- Introduce simple translations

#### Data

 Use bar charts, pictograms & line graphs

#### Fractions & decimals

- Recognise tenths & hundredths
- Identify equivalent fractions
- Add & subtract fractions with common denominators
- Recognise common equivalents
- Round decimals to whole numbers
- Solve money problem

## Year 5

#### Number/Calculation

- Secure place value to 1,000,000
- Use negative whole numbers in context
- Use Roman numerals to 1000 (M)
- Use standard written methods for all four operations
- Confidently add & subtract mentally
- Use vocabulary of prime, factor & multiple
- Multiply & divide by powers of ten
- Use square and cube numbers

#### **Geometry & Measures**

- Convert between
   different units
- Calculate perimeter of composite shapes & area of rectangles
- Estimate volume & capacity
- Identify 3-d shapes
- Measure & identify angles
- Understand regular polygons
- Reflect & translate shapes

#### Data

- Interpret tables & line graphs
- Solve questions about line graphs

#### Fractions

- Compare & order fractions
- Add & subtract fractions with common denominators, with mixed numbers
- Multiply fractions by units
- Write decimals as fractions
- Order & round decimal numbers
- Link percentages to fractions & decimals

## Year 6

#### Number/Calculation

- Secure place value & rounding to 10,000,000, including negatives
- All written methods, including long division
- Use order of operations (not indices)
- Identify factors, multiples & primes
- Solve multi-step number
   problems

#### Algebra

 Introduce simple use of unknowns

#### range of measures & conversions

**Geometry & Measures** 

 Calculate area of triangles / parallelograms

Confidently use a

- Use area & volume formulas
- Classify shapes by properties
- Know and use angle rules
- Translate & reflect shapes, using all four quadrants

#### Data

- Use pie charts
- Calculate mean averages

# Fractions, decimals & percentages

- Compare & simplify fractions
- Use equivalents to add fractions
- Multiply simple fractions
- Divide fractions by whole numbers
- Solve problems using decimals & percentages
- Use written division up to 2dp
- Introduce ratio & proportion