

## Key Objectives Y3- Y6

### Year 3

- Read, write and order whole numbers to at least 1000; know what each digit represents.
- Count on or back in tens or hundreds from any two- or three-digit number.
- Recognise unit fractions such as  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{10}$ , and use them to find fractions of shapes and numbers.
- Know by heart all addition and subtraction facts for each number to 20.
- Add and subtract mentally a 'near multiple of 10' to or from a two-digit number.
- Know by heart facts for the 2, 5 and 10 multiplication tables.
- Understand division and recognise that division is the inverse of multiplication.
- Use units of time and know the relationships between them (second, minute, hour, day, week, month, year).
- Understand and use £.p notation.
- Choose and use appropriate operations (including multiplication and division) to solve word problems, explaining methods and reasoning.
- Identify right angles.
- Identify lines of symmetry in simple shapes and recognise shapes with no lines of symmetry.
- Solve a given problem by organising and interpreting numerical data in simple lists, tables and graphs.

### Year 4

- Use symbols correctly, including less than (<), greater than (>), equals (=).
- Round any positive integer less than 1000 to the nearest 10 or 100.
- Recognise simple fractions that are several parts of a whole, and mixed numbers; recognise the equivalence of simple fractions.
- Use known number facts and place value to add or subtract mentally, including any pair of two-digit whole numbers.
- Carry out column addition and subtraction of two integers less than 1000, and column addition of more than two such integers.
- Know by heart facts for the 2, 3, 4, 5 and 10 multiplication tables.
- Derive quickly division facts corresponding to the 2, 3, 4, 5 and 10 multiplication tables.
- Find remainders after division.
- Know and use the relationships between familiar units of length, mass and capacity.
- Classify polygons, using criteria such as number of right angles, whether or not they are regular, symmetry properties.
- Choose and use appropriate number operations and ways of calculating (mental, mental with jottings, pencil and paper) to solve problems.

## Year 5

- Multiply and divide any positive integer up to 10000 by 10 or 100 and understand the effect.
- Order a given set of positive and negative integers.
- Use decimal notation for tenths and hundredths.
- Round a number with one or two decimal places to the nearest integer.
- Relate fractions to division and to their decimal representations.
- Calculate mentally a difference such as  $8006 - 2993$ .
- Carry out column addition and subtraction of positive integers less than 10000.
- Know by heart all multiplication facts up to  $10 \times 10$ .
- Carry out short multiplication and division of a three-digit by a single-digit integer.
- Carry out long multiplication of a two-digit by a two-digit integer.
- Understand area measured in square centimetres ( $\text{cm}^2$ ); understand and use the formula in words 'length  $\times$  breadth' for the area of a rectangle.
- Recognise parallel and perpendicular lines, and properties of rectangles.
- Use all four operations to solve simple word problems involving numbers and quantities, including time, explaining methods and reasoning.

## Year 6

- Multiply and divide decimals mentally by 10 or 100, and integers by 1000, and explain the effect.
- Order a mixed set of numbers with up to three decimal places.
- Reduce a fraction to its simplest form by cancelling common factors.
- Use a fraction as an operator to find fractions of numbers or quantities (e.g.  $\frac{5}{8}$  of 32,  $\frac{7}{10}$  of 40,  $\frac{9}{100}$  of 400 centimetres).
- Understand percentage as the number of parts in every 100, and find simple percentages of small whole-number quantities.
- Solve simple problems involving ratio and proportion.
- Carry out column addition and subtraction of numbers involving decimals.
- Derive quickly division facts corresponding to multiplication tables up to  $10 \times 10$ .
- Carry out short multiplication and division of numbers involving decimals.
- Carry out long multiplication of a three-digit by a two-digit integer.
- Use a protractor to measure acute and obtuse angles to the nearest degree.
- Calculate the perimeter and area of simple compound shapes that can be split into rectangles.
- Read and plot co-ordinates in all four quadrants.
- Identify and use the appropriate operations (including combinations of operations) to solve word problems involving numbers and quantities, and explain methods and reasoning.
- Solve a problem by extracting and interpreting information presented in tables, graphs and charts.

### Useful Websites

- [www.bbc.co.uk/skillswise/](http://www.bbc.co.uk/skillswise/)
- [www.mathszone.co.uk/](http://www.mathszone.co.uk/)
- [www.woodlands-junior.kent.sch.uk](http://www.woodlands-junior.kent.sch.uk)