

## Y5 maths - What can a successful learner do?

### Number Place Value

*I can read, write, order and compare numbers to at least 1 000 000 and know the value of each digit.*

*I count forwards or backwards in steps 10, 100, 1000, 10000 or 100000 for any given number up to 1000000.*

*I can use negative numbers in my work and can count backwards and forwards to and from negative numbers.*

*I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.*

*I can solve number problems and practical problems that involve numbers up to 1000000, negative numbers, rounding or jumping in steps.*

*I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals.*

### Addition Subtraction

*I can add and subtract whole numbers with*

*more than 4 digits using written methods such as column addition and subtraction.*

*I can add and subtract larger numbers in my head.*

*I round numbers to check the accuracy of my solution.*

*I can solve addition and subtraction multi-step problems, deciding which operations and methods to use and why.*

## **Multiplication Division**

*I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.*

*I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.*

*I know whether a number up to 100 is prime and recall prime numbers up to 19.*

*I can multiply 4 digit numbers by a one- or two-digit number using a written method, including long multiplication for two-digit numbers.*

*I multiply and divide numbers mentally drawing upon my times table knowledge and other*

*number facts.*

*I can divide 4 digit numbers by a one-digit number using the written method of short division and find the remainder.*

*I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.*

*I know what square numbers and cube numbers are, including the notation for squared (2) and cubed (3).*

*I can solve multiplication and division problems using my knowledge of factors and multiples, squares and cubes.*

*I can solve more difficult problems involving addition, subtraction, multiplication and division and a combination of these.*

*I can solve problems including scaling by simple fractions and problems involving simple rates.*

## **Fractions**

*I can compare and order fractions whose denominators are all multiples of the same number.*

*I can name and write equivalent fractions of a given fraction, and show these in a drawing*

*(including tenths and hundredths).*

*I know what mixed numbers and improper fractions are and I can convert from one to the other [for example,  $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$ ].*

*I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.*

*I use diagrams and some fraction tools to multiply proper fractions ( $\frac{7}{10}$ ) and mixed numbers ( $1 \frac{7}{10}$ ) by whole numbers.*

*I can read and write decimal numbers as fractions [for example,  $0.71 = \frac{71}{100}$ ].*

*I know what thousandths are and how to use them with tenths, hundredths and decimals.*

*I can round decimals with two decimal places to the nearest whole number and to one decimal place.*

*I can read, write, order and compare numbers with up to three decimal places.*

*I can solve problems involving numbers with up to three decimal places.*

*I know what the per cent symbol is (%) 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.*

*I work on problems which require knowing percentage and decimal equivalents of  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$  and those fractions with a denominator of a multiple of 10 or 25.*

## **Measurement**

*I can convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).*

*I can change metric units to become imperial units such as inches, pounds and pints.*

*I can calculate the perimeter of multi-shape shapes in centimetres and metres.*

*I can calculate the area of rectangles in square centimetres ( $\text{cm}^2$ ) and square metres ( $\text{m}^2$ ) and estimate the area of irregular shapes.*

*I can estimate volume [for example, using  $1 \text{ cm}^3$  blocks to build cuboids] and capacity [for example, using water].*

*I can convert between the units of time.*

*I can solve more difficult problems which involve units of measurement, decimal numbers and scales.*

## Shape

*I can Identify 3-D shapes, including cubes and other cuboids, from 2-D drawings.*

*I know that angles are measured in degrees and I can estimate and compare acute, obtuse and reflex angles.*

*I can draw a given angle (such as  $47^\circ$ ), and then measure them in degrees ( $^\circ$ ).*

*I know one whole turn - or a set of angles all around a point - measure a total of  $360^\circ$ .*

*I know that a straight line - or angles that add up to a straight line - measure  $180^\circ$ .*

*I can identify multiples of  $90^\circ$  (right angles).*

*I can find the missing lengths and angles of a rectangle.*

*I know regular shapes have equal sides and angles and irregular shapes do not have equal sides and angles.*

## Position

*I can reflect or translate a shape on a grid.*

## **Statistics**

*I can solve problems using a line graph to find the answers.*

*I can find the information I need from a timetable or large table of data.*