

# Adventure of the Missing Number – MATHS CONTENT

## Key stage 1

We look at counting things into tens and units how to write the number ie. 2 lots of ten and 2 left over would be written 22. We use a number square to order numbers and discuss the place value of a digit in two digit numbers. We then introduce a number line and order a series of two digit numbers on the line. We estimate how many jelly babies are in a jar by estimating how many spoonfuls are in the jar when each spoonful is five jelly babies. Using a number square we introduce the idea of 'counting on' and back from a given number in ones and then twos, then use counting on and back to solve a simple addition and subtraction calculation, where we count back in blocks of ten as well as in single units. We introduce the idea of partitioning numbers and use this method to solve a two digit subtraction calculation. Using the number square we look at the 2, 5 and 10 times tables and see the pattern they make on the square. We introduce the idea of number bonds and work through a series of number bonds from 1 to 20.

## Lower Key Stage 2

We briefly count on and back from positive to negative numbers and back again. Using a 'Hundreds, Tens and Units' chart we order a series of three digit numbers in descending order then, on a number line, place a series of three digit numbers in their correct position on the line. We introduce the idea of rounding and round two numbers to the nearest 10, 100 and 1000 then, using partition, we find the difference between them. Rounding is used again to estimate the answer to an addition calculation, then we use the written column method to find the exact answer. Partition is again used to solve a mathematical clue involving three digit numbers both for addition and subtraction. We solve a subtraction calculation involving two four digit numbers using the written column method. We look at the 6,7 and 8 times tables. We use the technique of doubling and halving to make a mental multiplication calculation easier. We demonstrate that dividing can be seen as 'sharing' by dividing a number of jelly babies between a different number of people and then explore division as the inverse of multiplication by looking at time table facts.

## Upper Key Stage 2

We briefly count on and back from positive to negative numbers and back again. We look at place value in a seven digit number and compare it in size to a 5 digit number made from the same digits. We then order three six digit numbers on a number line. We multiply and divide decimal numbers by 10, 100 and 1000. Partition is used to subtract 2 five digit numbers mentally. We set a problem of adding two decimal numbers, which initially we round to the nearest whole number and add together to find an approximate answer. Then we use the written column method to find the exact answer. Partition is again used to solve a mathematical clue involving three digit numbers both for addition and subtraction. We subtract two larger decimal numbers using the written column method. We introduce the idea of factors and how to recognise when a number will have factors of two, five and ten, then use times tables facts to find the factors of various given numbers. We explain that a prime number has factors of only one and itself. We use the technique of doubling and halving to make a mental multiplication calculation easier then use the written column multiplication method to check our answer was correct. We introduce division by partitioning numbers to make the calculations easy to do mentally, then we introduce simple written division by dividing a four digit number by a single digit.