



## Key mental skills and strategies

### FS1

- Count up to 10
- Recognise numerals to 10
- Count back from 10 to 1
- Count up to three or four objects by saying one number for each item
- Count up to six objects from a larger group of up to 10 objects
- Count sounds such as claps and taps up to 10
- Count up to 10 objects

### FS2

- All of the skills above
- Place numbers up to 10 in order
- Count up to 10 from any number
- Count up to and back from 20 to 1
- Choose the correct number to represent 1 to 5 objects
- Choose the correct number to represent 1 to 10 objects
- Place numbers in order up to 20 (as an unbroken chain, starting from 1)
- Place numbers in order up to 20 (as an unbroken chain, starting from any number)
- Estimate how many objects up to 10 I can see, and check by counting them
- Say 1 more or less than any number between 0 – 20



## Year 1

- All of the skills above
- Count forwards to and backwards from 100
- Count to and across 100 from any number
- Read and write and order numbers to 100
- Count back from 50
- Count in steps of 10
- Recall by heart all number bonds that total 10 and 20
- Find 1 more or less than any number up to 30
- Recognise odd and even numbers to 20
- Recall by heart all number bonds that total 5 and 6
- Recall by heart all number bonds that total 7 and 8
- Recall by heart all number bonds that total 9
- Recall doubles of all numbers to double 5
- Recall halves of all numbers to half of 10
- Recognise even numbers up to 20

## Year 2

- Recognise the place value of each digit in a 2 digit number
- Find 1 more or less than any number up to 100
- Find 10 more or less than any number between 0 and 100
- Count forwards and backwards in multiples of 2 to 20
- Recall and use multiplication facts for 2, 3, 5 and 10 times tables
- Recall by heart all division facts for 2 up to 24
- Recall by heart all division facts for 10 up to 120
- Recall by heart all division facts for 5 up to 60
- Count forwards and backwards in multiples of 10
- Count forwards and backwards in multiples of 5 to 100
- Recall by heart all bonds of multiples of 10 up to 100
- Recognise odd and even numbers up to 100
- Read, compare and order numbers up to 100
- Recall and use addition facts to 20 fluently and bonds of ten to 100



## Year 3

- All of the skills above
- Recognise odd and even numbers up to 100
- Recognise the place value of each digit in a 2-3 digit number
- Round 2 digit numbers to the nearest 10
- Double any number up to double 20
- Read and write numbers up to 1000 in words and numerals
- Count forwards and backwards in multiples of 25, 50, 100
- Recall and use multiplication and division facts for 2, 3, 4, 5, 8 and 10 times tables
- Find 1, 10 or 100 more or less than any given number up to 3 digits
- Partition numbers (For example,  $123 = 100 + 20 + 3$ )
- Recall and use addition and subtraction facts to 20 fluently and use this derive facts to 100
- Practise a wide range of mental strategies, including number bonds, adding near multiples of 10 and near doubles
- Add and subtract 2 digit numbers mentally and begin to add/subtract 3 digit numbers mentally
- Read, compare and order numbers up to 100/1000

## Year 4

- All of the skills above
- Read, compare and order numbers up to 10,000
- Recognise the place value of each digit in a 3/4/5 digit number
- Round any given number to the nearest 10, 100, 1000
- Double and halve any 2 digit number
- Recall and use multiplication and division facts up to  $12 \times 12$
- Count in multiples of 6, 7, 9, 25 and 1000
- Count backwards through zero
- Find 1000 more or less than any given number
- Partition numbers into thousands, hundreds, tens, ones
- Add and subtract 2 digit and 3 digit numbers mentally
- Use multiplication facts to multiply pairs of multiples of 10 and 100 e.g.  $30 \times 200$
- Identify all the squares of numbers between 1 and 12 and use the notation for squared ( $^2$ )
- Recall prime numbers up to 20
- Multiply 3 single digit numbers



## Years 5 and 6

- All of the skills above
- Recognise the place value of each digit in numbers up to 10,000,000
- Estimate and use the inverse to check
- Count forwards and backwards in steps of 10 from any given number up to 1,000,000
- Count forwards and backwards with positive and negative numbers
- Perform mental calculations including mixed operations with larger numbers
- Multiply and divide numbers and those involving decimals by 10, 100 and 1000 and explain the effect
- Recognise and use cube numbers, and the notation for cubed (<sup>3</sup>)
- I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000
- Round any given number to the nearest 10, 100, 1000, 10000, 100000 and round decimals to the nearest whole number
- Recall the basic fraction/percentage/decimal equivalences
- Identify multiples and factors