# Year 2 Teacher Assessment Frameworks -Mathematics-

# Pre-Key Stage Standard 1 (PKF1)

The pupil can:

- demonstrate an understanding of the concept of transaction (e.g. by exchanging a coin for an item)
- distinguish between 'one' and 'lots', when shown an example of a single object and a group of objects
- demonstrate an understanding of the concept of 1:1 correspondence

## Pre-Key Stage Standard 2 (PKF2)

The pupil can:

- identify the big or small object from a selection of two
- say the number names to 5 in the correct order.
- demonstrate an understanding of the concept of numbers up to 5 by putting together the right number of objects when asked
- copy and continue simple patterns using real life materials (e.g. apple, orange, apple, orange)

•sort objects according to a stated characteristic (e.g. group all the small balls together)

#### Pre-Key Stage Standard 3 (PKF3)

The pupil can:

- identify how many objects there are in a group of up to 10 objects, recognising smaller groups on sight and counting the objects in larger groups up to 10
- demonstrate an understanding that the last number counted represents the total number of the count
- copy and continue more advanced patterns using real life materials (e.g apple, apple orange, apple, apple orange)

• use real life materials to add and subtract 1 from a group of objects and indicate how many are now present

#### Pre-Key Stage Standard 4 (PKF4)

The pupil can:

- count to 20 demonstrating that the next number in the count is one more and the previous number is one less
- solve number problems involving the addition and subtraction of single digit numbers up to 10
- demonstrate an understanding that the total number of objects changes when objects are added or taken away
- demonstrate an understanding that the number of objects remains the same when they are arranged, providing that nothing has been added or taken away
- demonstrate an understanding of the mathematical symbols of add, subtract and equal to
- read and write numbers in numerals from 0-9
- demonstrate an understanding of the composition of numbers to 5 and a developing ability to recall number bonds to and within 5
- demonstrate an understanding of the commutative law
- demonstrate an understanding of inverse relationships involving addition and subtraction

## Working towards the expected standard

The pupil can:

- read and write numbers in numerals up to 100
- partition a two-digit number into tens and ones to demonstrate an understanding of place value, though they may use structured resources1 to support them
- add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required, explaining their method verbally, in pictures or using apparatus (e.g. 23 + 5; 46 + 20; 16 5; 88 30)
- recall at least four of the six2 number bonds for 10 and reason about associated facts (e.g. 6 + 4 = 10,

therefore 4 + 6 = 10 and 10 - 6 = 4)

- count in twos, fives and tens from 0 and use this to solve problems
- know the value of different coins

• name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties (e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres).

## Working at the expected standard

The pupil can:

• read scales in divisions of ones, twos, fives and tens

• partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus

• add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)

• recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships

(e.g. If 7 + 3 = 10, then 17 + 3 = 20; if 7 - 3 = 4, then 17 - 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 - 14 = 3 and 17 - 3 = 14)

• recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary

- identify 1/4, 1/3, 1/2, 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole
- use different coins to make the same amount
- read the time on a clock to the nearest 15 minutes

• name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.

## Working at greater depth within the expected standard

The pupil can:

read scales where not all numbers on the scale are given and estimate points in between

• recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts

• use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g.  $29 + 17 = 15 + 4 + \Box$ ; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc.)

• solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?')

- read the time on a clock to the nearest 5 minutes
- describe similarities and differences of 2-D and 3-D shapes, using their properties

(e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).