

Year 1 Learning Outcomes

Autumn

Previous Reception experience of counting within 100

- 1 Pupils count within 100 in different ways

Comparison of quantities and part-whole relationships

- 1 Pupils explain that items can be compared using length and height
- 2 Pupils explain that items can be compared using weight/mass and volume/capacity
- 3 Pupils count a set of objects
- 4 Pupils compare sets of objects
- 5 Pupils use equality and inequality symbols to compare sets of objects
- 6 Pupils use equality and inequality symbols to compare expressions
- 7 Pupils explain what a whole is
- 8 Pupils explain that a whole can be split into parts
- 9 Pupils explain that a whole can represent a group of objects
- 10 Pupils identify a part of a whole group
- 11 Pupils explain what a part-whole model is
- 12 Pupils use a part-whole model to represent a whole partitioned into two parts
- 13 Pupils use a part-whole model to represent a whole partitioned into more than two parts

Numbers 0 – 5

- 1 Pupils explain that numbers can represent how many objects there are in a set
- 2 Pupils explain that ordinal numbers show a position and not a set of objects
- 3 Pupils partition numbers one to five in different ways
- 4 Pupils partition the numbers one to five in a systematic way
- 5 Pupils find a missing part when one part and the whole is known
- 6 Pupils show one more and one less than a number using representations. Pupils describe this accurately.
- 7 Pupils show one more and one less than a number using representations. Pupils describe this accurately.
- 8 Pupils use a bar model to represent a whole partitioned into two parts

Recognise, compose, decompose and manipulate 2D and 3D shapes

- 1 Pupils compose pattern block images

- 2 Pupils copy, extend and develop repeating and radiating pattern block patterns
- 3 Pupils compose tangram images
- 4 Pupils investigate tetromino and pentomino arrangements
- 5 Pupils investigate ways that four cubes can be composed into different 3D models
- 6 Pupils explore, discuss and compare 3D shapes
- 7 Pupils identify 2D shapes within 3D shapes
- 8 Pupils explore, discuss and compare 2D shapes
- 9 Pupils explore, discuss and identify circles and shapes that are not circles from shape cut-outs
- 10 Pupils explore, discuss and identify triangles and shapes that are not triangles from shape cut-outs
- 11 Pupils explore, discuss and identify rectangles (including squares) from shape cut-outs

Spring

Numbers 0 – 10

- 1 Pupils count a set of objects and match the spoken number to the written numeral and number name
- 2 Pupils represent the numbers 6 to 10 using a five and a bit structure
- 3 Pupils identify the whole and parts of the numbers 6 to 10 using the five and a bit structure
- 4 Pupils explore the numbers 6 to 10 using the part whole model and the five and a bit structure
- 5 Pupils explain where 6, 7, 8 and 9 lie on a number line
- 6 Pupils explain what odd and even numbers are and the difference between them
- 7 Pupils explain how even and odd numbers can be partitioned
- 8 Pupils partition numbers 6 to 10 in different ways
- 9 Pupils partition the numbers 6 to 10 in a systematic way
- 10 Pupils identify a missing part when a whole is partitioned into two parts

Additive Structures

- 1 Pupils combine two or more parts to make a whole

- 2 Pupils explain that addends can be represented in any order. This is called the commutative law
- 3 Pupils explain that the = sign can be used to show that the whole and the sum of the parts are equal (1)
- 4 Pupils explain that the = sign can be used to show that the whole and the sum of the parts are equal (2)
- 5 Pupils add parts to find the value of the whole and write the equation
- 6 Pupils find the missing addend in an equation
- 7 Pupils explain how even and odd numbers can be partitioned
- 8 Pupils make addition and subtraction stories and write equations to match
- 9 Pupils represent 'first, then, now' stories with addition equations (1)
- 10 Pupils represent 'first, then, now' stories with addition equations (2)
- 11 Pupils represent 'first, then, now' stories with subtraction equations (1)
- 12 Pupils represent 'first, then, now' stories with subtraction equations (2)
- 13 Pupils represent different types of stories with subtraction calculations
- 14 Pupils make addition and subtraction stories, writing equations to match
- 15 Pupils work out the missing part of an addition story and equation if the other two parts are known
- 16 Pupils work out the missing part of a subtraction story and equation if the other two parts are known
- 17 Pupils explain that addition and subtraction are inverse operations (1)
- 18 Pupils explain that addition and subtraction are inverse operations (2)
- 19 Pupils use additive structures to think about addition and subtraction equations in different ways

Addition and subtraction facts within 10

- 1 Pupils explain that addition is commutative
- 2 Pupils find pairs of numbers to 10 (1)
- 3 Pupils find pairs of numbers to 10 (2)
- 4 Pupils add and subtract 1 from any number
- 5 Pupils explain what the difference is between consecutive numbers
- 6 Pupils explain what happens when 2 is added to or subtracted from odd and even numbers

- 7 Pupils explain what the difference is between consecutive odd and even numbers
- 8 Pupils explain what happens when zero is added to or subtracted from a number
- 9 Pupils explain what happens when a number is added to or subtracted from itself
- 10 Pupils double numbers and explain what doubling means
- 11 Pupils halve numbers and explain what halving means
- 12 Pupils use knowledge of doubles and halves to calculate near doubles and halves
- 13 Pupils represent different types of stories with subtraction calculations
- 14 Pupils use knowledge and strategies to add 5 and 3 and 6 and 3

Summer

Numbers 0 -20

- 1 Pupils explain that the digits in the numbers 11 to 19 express quantity
- 2 Pupils explain that the digits in the numbers 11 to 19 express position on a number line
- 3 Pupils identify the quantity shown in a representation of numbers 11 to 19
- 4 Pupils use knowledge of '10 and a bit' to solve problems
- 5 Pupils use knowledge of '10 and a bit' to solve problems
- 6 Pupils explore odd and even numbers within 20
- 7 Pupils double the numbers 6 to 9 and halve the result, explaining what doubling and halving is
- 8 Pupils use knowledge of addition facts within 10 to add within 20
- 9 Pupils use knowledge of subtraction facts within 10 to subtract within 20
- 10 Pupils use knowledge of addition and subtraction facts within 10 to add and subtract within 20
- 11 Pupils measure one object with different non-standard measures and record outcomes
- 12 Pupils measure items using individual cm cubes (Dienes)
- 13 Pupils measure length from zero cm using a ruler
- 14 Pupils estimate length in cm
- 15 Pupils estimate length, measure length and record these values in a table

Unitising and coin recognition

- 1 Pupils count efficiently in groups of two
- 2 Pupils count efficiently in groups of ten
- 3 Pupils count efficiently in group of five
- 4 Pupils count efficiently by counting in groups of two, five and ten
- 5 Pupils explain the value of a 1p coin in pence
- 6 Pupils recognise and explain the value of 2p, 5p and 10p coins
- 7 Pupils explain that a single coin can be worth several pennies
- 8 Pupils use knowledge of the value of coins to solve problems
- 9 Pupils calculate the total value of the coins in a set of 2p coins
- 10 Pupils calculate the total value of the coins in a set of 5p coins
- 11 Pupils calculate the total value of the coins in a set of 10p coins
- 12 Pupils compare sets of 2p, 5p and 10p coins
- 13 Pupils relate what they have learnt to a real-life context
- 14 Pupils work out how many coins are needed to make a value of 10p
- 15 Pupils work out how many coins are needed to make a total value of 20p
- 16 Pupils use knowledge of the value of coins to solve problems

Position and direction

National curriculum statutory requirements (p10)

Pupils should be taught to:

- describe position, direction and movement, including whole, half, quarter and three-quarter turns.

Notes and guidance (non-statutory)

- Pupils use the language of position, direction and motion, including left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.
- Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face.

Time

National curriculum statutory requirements (p9)

Pupils should be taught to:

- sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.