## Previous Reception experiences and counting within 100 Number and Place Value

- 1NPV-1 Count within 100, forwards and backwards, starting with • any number.
1.9 Composition of numbers: 20-100


## Comparison of quantities and part-whole relationships

- 1NPV-1 Count within 100, forwards and backwards, starting with any number.
- 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and $=$.
- 1.1 Comparison of quantities and measures
- 1.2 Introducing 'whole' and 'parts': part-part-whole


## Numbers 0 to 5

- 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and $=$.
- 1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.
- 1.3 Composition of numbers: 0-5


## Recognise, compose, decompose and manipulate 2D and

- 1G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. operations.

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

- Read and write numbers to 100 in numerals;

Non Statutory Notes
NAS - Pupils combine and increase numbers, counting forwards and backwards.

Number and Place Value

- count, read and write numbers to 20 in numerals; count
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, leas
- read and write numbers from 1 to 20 in numerals and words Non Statutory Notes
NPV - Pupils practise counting (1, 2, 3...), ordering (for example, first, second, third...), and to indicate a quantity (for example, 3 apples, 2 centimetres), including solving simple concrete problems, until they are fluent
NAS - Pupils memorise and reason with number bonds to 10 and 20 -in several forms (for example, $9+7=$
$16 ; 16-7=9 ; 7=16-9$ ). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related
- recognise and name common 2-D and 3-D shapes, including:
- 2-D shapes [for example, rectangles (including squares), circles and triangles]
- 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

Non Statutory Notes
NPV - They recognise and create repeating patterns with objects and with shapes.

1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.

## Numbers 0 to 10

- 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and $=$. 1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.
- 1.4 Composition of numbers: 6-10


## Additive structures

- 1AS-2 Read, write and interpret equations containing addition + ), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.
- 1.5 Additive structures: introduction to aggregation and partitioning
- 1.6 Additive structures: introduction to augmentation and reduction


## Addition and subtraction facts within 10

- 1NF-1 Develop fluency in addition and subtraction facts within 10.
- 1.7 Addition and subtraction: strategies within 10


## Numbers 0 to 20

- 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and $=$
- 1.10 Composition of numbers: 11-19

G - Pupils handle common 2-D and 3-D shapes, naming these and related everyday objects fluently. They recognise these shapes in different orientations and sizes, and know that rectangles, triangles, cuboids and pyramids are not always similar to each other

## Number and Place Value

- Count, read and write numbers to 20 in numerals; count
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words

Non Statutory Notes
NPV - Pupils practise counting (1, 2, 3...), ordering (for example, first, second, third...), and to indicate a quantity (for example, 3 apples, 2 centimetres), including solving simple concrete problems, until they are fluent
NAS - Pupils memorise and reason with number bonds to 10 and 20 in several forms (for example, $9+7=$
$16 ; 16-7=9 ; 7=16-9)$. They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations.

## Number - addition and subtraction

- read, write and interpret mathematical statements involving addition ( + ), subtraction ( - ) and equals ( $=$ ) signs
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=-9$.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missin number problems. (NC Y2)
Non Statutory Notes
NAS - They discuss and solve problems in familiar practical contexts, including using quantities. Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are enabled to use these operations flexibly.


## Number - addition and subtraction

- read, write and interpret mathematical statements involving addition (+), subtraction ( - ) and equals (=) signs
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=-9$.
Non Statutory Notes
NAS - They discuss and solve problems in familiar practical contexts, including using quantities. Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are enabled to use these operations flexibly.


## Number and Place Value

- count, read and write numbers to 20 in numerals; count,
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, leas
- read and write numbers from 1 to 20 in numerals and words

Measurement

- compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
- measure and begin to record the following: lengths and heights

Non Statutory Notes

## Unitising and coin recognition

- 1NF-2 Count forwards and backwards in multiples of 2,5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.
- 2.1 Counting, unitising and coins


## Position and direction

- This topic is part of the National Curriculum but is not included in the DfE 2020 guidance or the NCETM Mastery PD Materials.


## Time

- This topic is part of the National Curriculum but is not included in the DfE $\mathbf{2 0 2 0}$ guidance or the NCETM Mastery PD Materials.


## Introduction to Fractions

- 3.0 Guidance on the teaching of fractions in Key Stage 1

NPV - Pupils practise counting (1, 2, 3...), ordering (for example, first, second, third...), and to indicate a quantity (for example, 3 apples, 2 centimetres), including solving simple concrete problems, until they are fluent.
NAS - Pupils memorise and reason with number bonds to 10 and 20-in several forms (for example, $9+7=16 ; 16-7=9 ; 7=16-9$ ). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations
M - Pupils move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units.

## Number and Place Value

- count in multiples of twos, fives and tens
recognise and know the value of different denominations of coins and notes
Non Statutory Notes
NPV - They practise counting as reciting numbers and counting as enumerating objects, and counting in twos, fives and tens from different multiples to develop their recognition of patterns in the number system (for example, odd and even numbers), including varied and frequent practice through increasingly complex questions.
NMD - They make connections between arrays, number patterns, and counting in twos, fives and tens.


## Geometry - Position and Direction

- describe position, direction and movement, including whole, half, quarter and three quarter turns Non Statutory Notes
GPD - 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.
GPD - Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock
face.


## Measurement

- compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]
- measure and begin to record the following: time (hours, minutes, seconds)
- 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.

Non Statutory Notes
$M$ - Pupils move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units.
$M$ - Pupils use the language of time, including telling the time throughout the day, first using o'clock and then half past

## Number - Fractions

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Non Statutory Notes
NF - Pupils are taught half and quarter as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. For example, they could recognise and find half a length, quantity, set of objects or shape. Pupils connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole.

## Measure

- compare, describe and solve practical problems for
- mass/weight [for example, heavy/light, heavier than, lighter than]
- capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Non Statutory Notes
M - The pairs of terms: mass and weight, volume and capacity, are used interchangeably at this stage.
Pupils move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example counting) and continuous (for example, liquid) measurement, to using manageable common standard units.


Dark grey references are
ready-to-progress criteria from the DfE Guidance 2020

Light grey references are from the NCETM Primary Mastery Professional
Development materials

| NAS | Number, Addition and Subtraction |
| :--- | :--- |
| NPV | Number and Place Value |
| NMD | Number, Multiplication and Division |
| G | Geometry |
| GPD | Geometry, Position and Direction |
| M | Measurement |

Both are available online

