Netherthorpe Primary School (updated December 2021)

**Maths Long Term Plan with Progression of Skills**

**Year 1**

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| **Autumn**  |
| **Knowledge**  | 1NPV–1 Count forwards and backwards within 1001NPV–2 Numbers to 20 in the linear number system | 1NPV–1 Count forwards and backwards within 1001NPV–2 Numbers to 20 in the linear number system | 1NPV–2 Numbers to 20 in the linear number system1AS–1 Compose and partition numbers to 10 |
| **Unit 1****Counting Within 100** | **Unit 2****Comparison of quantities and part-whole relationships** | **Unit 3****Numbers 0-5** |
| **Progression of Skills** | * Count within 100 in different ways
 | * Explain that items can be compared using length and height.
* Explain that items can be compared using weight/mass and volume/capacity.
* Count a set of objects.
* Compare sets of objects.
* Use equality and inequality symbols to compare sets of objects.
* Use equality and inequality symbols to compare expressions.
* Explain what a whole is.
* Explain that a whole can be split into parts.
* Explain that a whole can represent a group of objects.
* Identify a part of a whole group.
* Explain what a part-whole model is.
* Use a part-whole model to represent a whole partitioned into two parts.
* Use a part-whole model to represent a whole partitioned into more than two parts.
 | * Explain that numbers can represent how many objects there are in a set
* Explain that ordinal numbers show a position and not a set of objects
* Partition numbers one to five in different ways
* Partition the numbers one to five in a systematic way
* Find a missing part when one part and the whole is known
* Show one more and one less than a number using representations. Pupils describe this accurately.
* Show one more and one less than a number using representations. Pupils describe this accurately.
* Use a bar model to represent a whole partitioned into two parts
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| **Spring** |
| **Knowledge** | 1G–1 Recognise common 2D and 3D shapes1G–2 Compose 2D and 3D shapes from smaller shapes | 1NPV–2 Numbers to 20 in the linear number system1AS–1 Compose and partition numbers to 10 | 1AS–2 Read, write and interpret additive equations | 1NF–1 Fluently add and subtract within 10 |
| **Unit 4****Recognise, compose, decompose and manipulate 2D and 3D shapes** | **Unit 5****Numbers 0-10** | **Unit 6****Additive Structures** | **Unit 7****Addition and Subtraction facts within 10** |
| **Progression of Skills** | * Compose pattern block images
* Copy, extend and develop repeating and radiating pattern block patterns
* Compose tangram images
* Investigate tetromino and pentomino arrangements
* Pupils investigate ways that four cubes can be composed into different 3D models
* Explore, discuss and compare 3D shapes
* Identify 2D shapes within 3D shapes
* Explore, discuss and compare 2D shapes
* Explore, discuss and identify circles and shapes that are not circles from shape cut-outs
* Explore, discuss and identify triangles and shapes that are not triangles from shape cut-outs
* Explore, discuss and identify rectangles (including squares) from shape cut-outs
 | * Count a set of objects and match the spoken number to the written numeral and number name
* Represent the numbers 6 to 10 using a five and a bit structure
* Identify the whole and parts of the numbers 6 to 10 using the five and a bit structure
* Explore the numbers 6 to 10 using the part whole model and the five and a bit structure
* Explain where 6, 7, 8 and 9 lie on a number line
* Explain what odd and even numbers are and the difference between them
* Explain how even and odd numbers can be partitioned
* Partition numbers 6 to 10 in different ways
* Partition the numbers 6 to 10 in a systematic way
* Identify a missing part when a whole is partitioned into two parts
 | * Combine two or more parts to make a whole
* Explain that addends can be represented in any order. This is called the commutative law
* Explain that the = sign can be used to show that the whole and the sum of the parts are equal (1)
* Explain that the = sign can be used to show that the whole and the sum of the parts are equal (2)
* Add parts to find the value of the whole and write the equation
* Find the missing addend in an equation
* Explain how even and odd numbers can be partitioned
* Make addition and subtraction stories and write equations to match
* Represent ‘first, then, now’ stories with addition equations (1)
* Represent ‘first, then, now’ stories with addition equations (2)
* Represent ‘first, then, now’ stories with subtraction equations (1)
* Represent ‘first, then, now’ stories with subtraction equations (2)
* Represent different types of stories with subtraction calculations
* Make addition and subtraction stories, writing equations to match
* Work out the missing part of an addition story and equation if the other two parts are known
* Work out the missing part of a subtraction story and equation if the other two parts are known
* Explain that addition and subtraction are inverse operations (1)
* Explain that addition and subtraction are inverse operations (2)
* Use additive structures to think about addition and subtraction equations in different ways
 | Explain that addition is commutativeFind pairs of numbers to 10 (1)Find pairs of numbers to 10 (2)Add and subtract 1 from any number* Explain what the difference is between consecutive numbers
* Explain what happens when 2 is added to or subtracted from odd and even numbers
* Explain what the difference is between consecutive odd and even numbers
* Explain what happens when zero is added to or subtracted from a number
* Explain what happens when a number is added to or subtracted from itself
* Double numbers and explain what doubling means
* Halve numbers and explain what halving means
* Use knowledge of doubles and halves to calculate near doubles and halves
* Represent different types of stories with subtraction calculations
* Use knowledge and strategies to add 5 and 3 and 6 and 3
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| **Summer** |
| **Knowledge** |  |
| **Specific Knowledge** | **Unit 8** | **Unit 9** | **Unit 10** | **Unit 11** |
| **Progression of Skills** | Will be updated soon |