

Nursery Maths Yearly Curriculum

Maths will be taught twice a week through planned adult-led sessions and also supported throughout each day during children's play.

Daily Practise:

- Days of the week song at the beginning of each session.
- Number rhymes
- Encouraging the use of mathematical language, such as tall, short, round etc.
- Have numbers displayed in provision to encourage recognition and matching quantities to numerals.
- Rote counting opportunities through play, hide and seek for example.

Autumn 1

3-4 Guidance

Colours – Recognising, naming and sorting

Sorting – Sorting by various characteristics e.g. type, shape, colour.

Size - Using the language of size e.g big/little, small/large. Link to the home corner and Goldilocks and the Three Bears.

Position – Understanding position through words alone.

- Describe a familiar route.
- Link to Everywhere Bear's journey.
- Hide Bluebell and give clues e.g. "He is under the chair." "He is behind the toadstool."
- Read What the Labybird Heard.

Key Vocabulary

Numeral – The written symbol for a number.

The Cardinal Number– The number that identifies how many are in a set.

Subitise – To instantly recognise the quantity without the need to count.

More than, fewer than – in talk of quantities of objects.

More than, less than – in talk of number, for example "one is less than two."

Key Representations/Resources

Numerals



Fingers



Five Frames



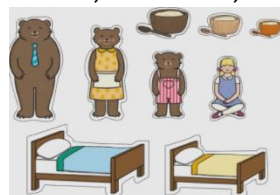
Natural/real life Objects



Numicon



Small, medium, large objects to compare



Sorting Bowls and Objects



Autumn 2 3-4 Guidance

Counting Principles

1-1 principle - Saying one number for each item in order 1,2,3,4,5.

Encourage the children the strategy of lining up objects to touch count as they say each number for the individual object.

The stable-order principle – Understanding the order of numbers through rote counting in games and number rhymes. Children can be encouraged to count beyond 5 when not counting objects.

The cardinal principle – Knowing that the last number reached when counting a small set of objects tells you how many there are in total.

Subitising – Quick recognition of up to 3 objects without having to count.

Key Vocabulary

Count – reciting numbers in order. Finding the cardinal number.

Numeral – The written symbol for a number.

The Cardinal Number– The number that identifies how many are in a set. “The cardinal number is...”

How many? – The total/cardinal number.

Subitise – To instantly recognise the quantity without the need to count.

More than, fewer than – in talk of quantities of objects.

More than, less than – in talk of number, for example “one is less than two.”

Key Representations/Resources

Numerals



Fingers



Five Frames



Natural/real life Objects



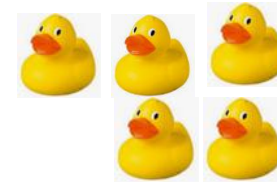
Numicon



Topic resources e.g 3 Kings.



Number Rhymes



Spring 1 3-4 Guidance

Number and Place Value - Exploring and understanding number 1

Number Blocks Episode 1.
Counting and representing one.
Number Blocks Episode 2.
Another one.

1 being the first number, its
position on a number line,
ordinal numbers

Numicon 1
Dice 1

Subitising 1

The numeral and formation of 1
Number 1 in the environment

Representing 1 using marks,
pictures and finger
Matching numeral to quantity

Exploring and understanding number 2

Number Blocks Episode 3.
Counting and representing two.

Exploring and understanding number 3

Number Blocks Episode 4.
Counting and representing three.
Episode 5 – One, two, three!

Key Vocabulary

Count – reciting numbers in
order. Finding the cardinal
number.

Numeral – The written
symbol for a number.

The Cardinal Number– The
number that identifies how
many are in a set. “The
cardinal number is..”

How many? – The
total/cardinal number.

Subitise – To instantly
recognise the quantity without
the need to count.

More than, fewer than – in
talk of quantities of objects.

More than, less than – in
talk of number, for example
“one is less than two.”

Key Representations/Resources

Numerals



Fingers



Five Frames



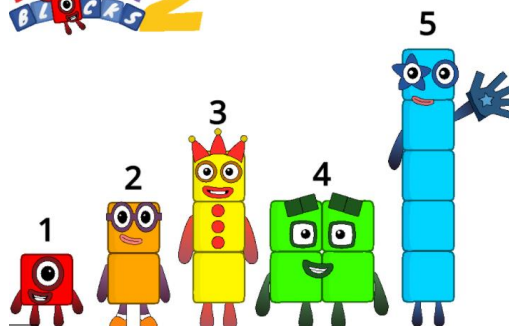
Natural/real life Objects



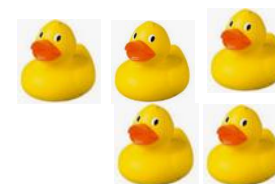
Numicon



Number Blocks



Number Rhymes



Spring 2

3-4 Guidance

Number and Place Value - Exploring and understanding number 4

Number Blocks Episode 6.
Counting and representing four.
Number 4 in the environment
Representing 4 using marks, pictures and finger
Matching numeral to quantity

Meet Four

- 4 is one more than 3
- Counting to 4
- The composition of 4, 2 is part of me, 3 is part of me, 1 is part of me.
- Recognition of 4 items without counting (subitising)

Exploring and understanding number 5

Number Blocks Episode 7.
Counting and representing five.
Meet Five

- 5 is one more than 4
- Counting to 5
- Line up 1 to 5 in order
- As above – including the composition of 5, 3 is a part of me, 4 is a part of me, 2 is a part of me, 1 is a part of me.

Key Vocabulary

Count – reciting numbers in order. Finding the cardinal number.

Numeral – The written symbol for a number.

The Cardinal Number– The number that identifies how many are in a set. “The cardinal number is...”

How many? – The total/cardinal number.

Subitise – To instantly recognise the quantity without the need to count.

More than, fewer than – in talk of quantities of objects.

More than, less than – in talk of number, for example “four is less than five.”

Key Representations/Resources

Numerals

1,2,3,4,5

Fingers



Five Frames



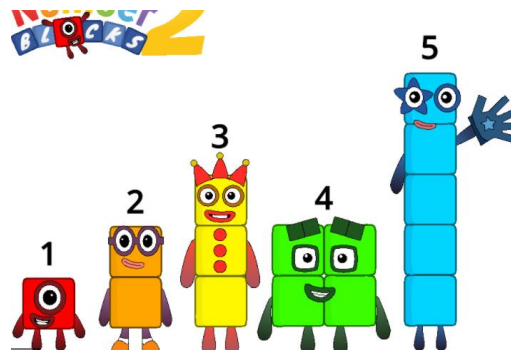
Natural/real life Objects



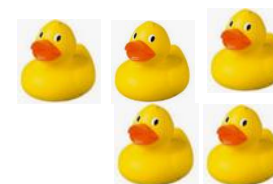
Numicon



Number Blocks



Number Rhymes



Summer 1

3-4 Guidance

Shape and Space

Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.

- Introduce 2D shapes – names, properties and real life shapes in the environment
- Kim's Game – what's the missing shape? Reinforce shape recognition and names.
- 2D shape hunt. Use shape cards as tools to match the shape.
- Introduce 3D shapes - names, properties and real life shapes in the environment
- Sorting shapes by properties – pointy, flat, curved edges, straight edges, round.
- Combine shapes to make new ones - an arch, a bigger triangle, using 2 triangles to construct a square etc.

Pattern

Key Vocabulary

2D Shape – a flat shape.

3D Shape – a solid shape.

Adults to model vocabulary:

Edge, curve, straight, round, flat, corner, sides, faces.

Pattern

Repeating pattern

Key Representations/Resources

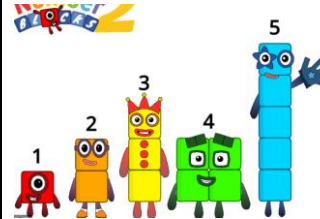
Natural/real life Objects



Construction



Number Blocks



Creating patterns with a variety of objects, including natural materials, painting stripes, building blocks.



- Talk about and identify patterns all around them e.g stripey, spotty.
- Extend and create ABAB patterns
- Notice and correct an error in a repeating pattern.

Summer 2

3-4 Guidance

Measurement

- **Ordering our day**
- **Length and height**
- **Weight**
- **Capacity**

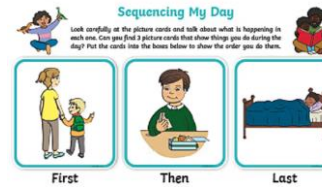
Make comparisons between objects relating to size, length, weight and capacity.

Key Vocabulary

Adults to model and encourage the use of vocabulary –

First, then, next, last.
Taller, shorter.
Heavy, heavier, heaviest.
Light, lighter, lightest.
Full, empty.

Key Representations/Resources



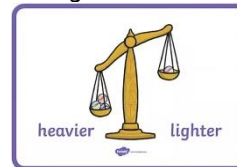
Physically comparing our height.



Using provision and natural material to compare and measure length.



Using scales and natural objects to compare weight.



Measure capacity indoors and outdoors using various items of provision.

