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RECEPTION Curriculum Progression
MATHEMATICS

Reception MATHS experiences taken from **Development Matters: Non-statutory curriculum guidance for the Early Years Foundation Stage**

Reception (end-of-year expectations)

NUMBER

- Count objects, actions and sounds.
- Subitise (recognize quantities without counting).
- Link the number symbol (numeral) with its cardinal number value.
- Count beyond ten.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0–5 and some to 10.

SHAPE AND MEASURE

- Select, rotate and manipulate shapes to develop spatial reasoning skills.
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.

NUMERICAL PATTERNS

- Continue, copy and create repeating patterns.
- Compare length, weight and capacity.

EARLY LEARING GOALS

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10 including evens and odds, double facts and how quantities can be distributed equally.

NUMBER

AUTUMN

CURRICULUM LEARNING ACTIVITIES that support pupils to:

Autumn 1

- Numbers 1, 2, 3, 4 and 5:
  - numberness, numerals
  - counting to 1, 2, 3, 4 and 5
  - deep understanding of number and composition of each number
  - subitise (recognise quantities without counting) of each number
  - recognise the pattern of the counting system up to each number.
- Groups within 5:
  - comparing quantities of identical objects
  - comparing quantities of non- identical objects

Autumn 2

- Numbers 5:
  - numberness, numeral
  - counting to 5
  - deep understanding of number and composition of each number
  - subitise (recognise quantities without counting)

SPRING

CURRICULUM LEARNING ACTIVITIES that support pupils to:

Spring 1

- Numbers 6, 7 and 8.
- Numberness numeral, half and double facts, one more/less.
- Add and subtract using counters/objects
- Money making different amounts – compare, more/fewer
- Subitise

Spring 2

- Numbers 9 and 10.
- Numberness numeral, half and double facts, one more/less.
- Using a ten frame
- The part-whole model to 10
- Subtraction
- Subitise

ASSESSMENT CHECKPOINTS – look and listen for pupils to:

- Count 1:1 to 10.
- Order numbers to 10.

SUMMER

CURRICULUM LEARNING ACTIVITIES that support pupils to:

Summer 1

- Recap numbers 1 to 10.
- Numbers 11 to 15.
- Numberness: numeral.
- Adding and subtraction by counting on and counting back.
- Doubling
- Halving and sharing
- Odds and evens
- ELG: Have a deep understanding of number to 10, including the composition of each number;
- ELG: Subitise (recognise quantities without counting) up to 5;
- ELG: Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Summer 2

- Numbers 16-20.
- Adding and subtraction by counting on and back.

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of each number o recognise the pattern of the counting system up to each number • One more / One less to 5 • Introducing the part-whole model for number bonds up to 5 • Add and subtract using counters/objects • Money: 1p, 2p and 5p coins **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Subitise to 5. • Count 1:1 to 5. • Match numeral and quantity to 5. • Say one more and one less to 5. • Make up to 5 in different ways using a part whole model and say the corresponding number sentence. • Identify a 1p 2p and 5p coin and say its value. • Add and subtract within 5 using counters.	• Subitise • Match numeral and quantity to 10. • Say one more and one less to 10. • Make up to 10 in different ways using a part whole model and say the corresponding number sentence. • Add and subtract within 10 using counters. • Count on from a given number starting within 10. • Make different amounts using 1p, 2p and 5p coins.	• Grouping. • Problem solving. • ELG: Have a deep understanding of number to 10, including the composition of each number; • ELG: Subitise (recognise quantities without counting) up to 5; • ELG: Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Automatically recalls number bonds to 5. • Automatically recalls some number bonds to 10. • Knows double facts to 10. • Recall some subtraction facts within 10. • Use this knowledge to solve problems within 10. • ELG: Have a deep understanding of number to 10, including the composition of each number; • ELG: Subitise (recognise quantities without counting) up to 5; • ELG: Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

VOCABULARY:
Number, zero…twenty, none, how many? count (up, to, from, back), is the same as, more, less, as many as, same number as, equal, equal to, more than, larger, bigger, greater, most, biggest, largest, greatest, fewer, smaller, less, fewest, smallest, least, one more, one less, compare, order, first…twentieth, last, last but one, before, after, next, between, the same as, more, less, as many as, same number as, equal, equal to, more, larger, bigger, greater, most, biggest, largest, greatest, fewer, smaller, less, fewest, smallest, least, odd, even, Parts of a whole, half, add, more, and make, sum, total, altogether, take away, how many left?

SHAPE AND MEASURE

Reception (end-of-year expectations)
- Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- Continue, copy and create repeating patterns.
- Compare length, weight and capacity.

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CURRICULUM LEARNING ACTIVITIES that support pupils to:		
Autumn 1 • 2D & 3D shapes: Circle, triangle, square, rectangle, cone, sphere, cylinder. • Opportunities to build with and manipulate shapes in provision and use pattern blocks and tangrams. **Autumn 2** • 2D shapes: Pentagon and hexagon. • Fitting numicon plates on to base board and other opportunities to manipulate shapes in provision. • Opportunities to use pattern blocks and tangrams. • Positional language. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Order 4 objects by weight. • Use the vocabulary of weight to describe 2 objects. • Use simple mathematical language to describe circle, triangle, square, rectangle, cone, sphere, cylinder. • Fill a numicon board and match numicon plates to make a picture including flipping or rotating numicon plates if necessary. • Recognise that a shape can have other shapes within it.	**Spring 1** • Create own patterns within provision. • Cube and cuboid **Spring 2** • Height/length and weight. • Pyramid, triangular prism. • Create own patterns in provision with pattern block, tangrams, numicon plates etc. • Exploring more complex patterns **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Create and describe a pattern. • Use the vocabulary of time. • Order 3 objects by height and by capacity. • Use the vocabulary of height/length to describe 2 objects. • Use the vocabulary of capacity to describe 2 objects. • Use simple mathematical language to describe cube, cuboid and pyramid.	**Summer 1** • Repeating patterns, AB, AAB, ABC. • Create own repeating patterns in provision. **Summer 2** • Volume and capacity • Sorting into two groups • Recap all previous shape work / composing, decomposing shapes. • Time language. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Can continue a 3-part repeating pattern. • Can select, rotate and manipulate shapes to make another shape. • Can describe a shape using mathematical language. **Reception (end-of-year expectations)** • Select, rotate and manipulate shapes in order to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. • Continue, copy and create repeating patterns. • Compare length, weight and capacity.

VOCABULARY:
Weigh, balances, heavy, light, heavier than, lighter than, heaviest, lightest, scales. Size, compare, guess, estimate, enough, not enough, too much, too little, too many, too few, nearly, close to, about the same as. Length, height, width, depth, long, short, tall, high, low, wide, narrow, thick, thin, longer, shorter, taller, higher, longest, shortest, tallest, highest, far, near, close, measure. Sides, corners, straight, round, edges, curved, face.

NUMERICAL PATTERNS

Reception (end-of-year expectations)	EARLY LEARNING GOAL
• Notice patterns and arrange things in patterns.	• Verbally count beyond 20, recognising the pattern of the counting system. • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.

AUTUMN	SPRING	SUMMER
CURRICULUM LEARNING ACTIVITIES that support pupils to: **Autumn 1** • Comparing groups. • Oral counting to 10/20. • Numbers 1-4 half and double facts. **Autumn 2**	**CURRICULUM LEARNING ACTIVITIES that support pupils to:** **Spring 1** • Oral counting to and back from 20 starting at different numbers. • Comparing quantities. **Spring 2**	**CURRICULUM LEARNING ACTIVITIES that support pupils to:** **Summer 1** • Oral counting in 2s and 10s. • Comparing quantities. • Counting and patterns beyond 10. • Odd and even numbers • Sharing evenly between 2 groups

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• Oral counting to and back from 20. • Numbers 5 - half and double facts. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Can orally count to 10. • Can work out doubles and halves to 5	• Oral counting to 30,40.50…. • Equal/not equal. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Can orally count to 20. • Knows double facts to 6 and can work them out to 10. • Can work out if a number to 10 is odd or even.	• Numbers 6, 7 and 8 half and double facts. • Numbers 9 and 10 half and double facts. • Odd and even numbers using numicon plates. • ELG: Verbally count beyond 20, recognising the pattern of the counting system; • ELG: Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; • ELG: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. **Summer 2** • Sharing evenly between 2 groups • Problem solving by sharing • Time • ELG: Verbally count beyond 20, recognising the pattern of the counting system; • ELG: Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; • ELG: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. **ASSESSMENT CHECKPOINTS – look and listen for pupils to:** • Can orally count to 50. • Can compare quantities to 10 recognising when the quantity is the same, greater than or less than. • Can identify odd and even numbers to 10. • Knows double facts to 10. • Can share evenly between 2, 3 or 4 groups. • ELG: Verbally count beyond 20, recognising the pattern of the counting system; • ELG: Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; • ELG: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.
Vocabulary: **Compare, the same as, more, less, as many as, same number as, equal, equal to, more, larger, bigger, greater, most, biggest, largest, greatest, fewer, smaller, less, fewest, smallest, least, odd, even, pattern, pair, ones, tens, digit.**		