



LONG TERM PLAN

MATHEMATICS

School Organisation

Pupils in Nursery to Year 2 are taught as single-entry year groups. Key Stage 2 pupils are divided into 3 classes. This consists of one mixed Year 3/4 class, one mixed Year 4/5 class and one mixed Year 5/6 class. There are 3 possible journeys pupils can take through key Stage 2. Each pupil will spend two years in one of the Key Stage 2 classes. Thoughtful consideration has been made by Subject Leaders so that the curriculum we provide is correctly sequenced, ensuring that learning builds on prior learning no matter how pupils move through Key Stage 2.

How is the curriculum sequenced?

Our Early Years Curriculum offers a wide variety of rich activities and experiences which is crucial to child development. The Mathematics element lies within 'Mathematics' Educational Programme, although we acknowledge that all areas of learning and development in EYFS are inter-connected.

Mathematics Educational Programme (0 – 5 years)

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

| Nursery Scheme of learning | | | |
|----------------------------|--|---|---|
| | Number | Numerical Pattern | Shape, Space and Measures |
| Autumn Term | <ul style="list-style-type: none"> - Know and take part in number songs. - Count 3 small objects in a row with correct 1:1 correspondence. | <ul style="list-style-type: none"> - Verbally count from 1-5 - Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty' 'blobs' (Development Matters Non-statutory curriculum guidance) - Make patterns and imprints in the dough (using body parts or patterned tools), talking about what they see. | <ul style="list-style-type: none"> - Match and sort shapes. - To comment on size and volume. Big, small. Full, not full, empty. - Understand position through words alone. For example, "the bag is under the table" (Development Matters). - Talk about and explore 2D and 3D shapes (circles, rectangles, triangles and cuboids) using informal and mathematical language: sides, corners, straight, flat, round. |

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| Spring Term | <ul style="list-style-type: none"> - Know and take part in number songs. - Developing recognition of up to 3 objects, without having to count them individually (subitising) (Development Matters) - Recognise numerals to 3 - Can count more than 3 objects in a row. - Subitise up to 2 | <ul style="list-style-type: none"> - Recite numbers past 5 (Development Matters Non-statutory curriculum guidance) - Joins in with simple patterns (ABABAB) in sounds, objects, dance and movement, predicting what comes next. (Birthto5Matters) | <ul style="list-style-type: none"> - To comment on size and shape – big, small, medium, wide, tall, short. - Responds to and uses language of position and direction. On, under, through, over. Up and Down. (Birthto5Matters) - Compare quantities using language, 'more than,' fewer than.' (Development Matters Non-statutory curriculum guidance) - Predicts, moves and rotates objects to fit the space or create the shape they would like. (Birthto5Matters) - Select shapes appropriately: flat surfaces for building, a triangular prism for a roof. (Development Matters) |
| Summer Term | <ul style="list-style-type: none"> - Know and take part in number songs. - Show finger numbers up to 5 (Development Matters) - Solve real world mathematical problems with number up to 5 (Development Matters) - Subitise up to 3 (Development Matters Non-statutory curriculum guidance) - Say one number for each item in order: 1, 2, 3, 4, 5 (Development Matters Non-statutory curriculum guidance) - Link numerals and amounts: for example showing the right number of objects to match the numeral up to 5. For example, pot labelled '5 pencils' '3 trucks' (Development Matters Non-statutory curriculum guidance) - Begin to recognise numerals 0 to 10 (Birthto5Matters) - Counts up to 5 items, recognising that the last number said represents the total counted so far (cardinal principle) (Birthto5Matters) - Explores using a range of their own marks and signs to which they ascribe mathematical meanings (Birthto5Matters) | <ul style="list-style-type: none"> - Verbally count from 1-10 - Sequence familiar activities and events (Development Matters Non-statutory curriculum guidance) describing a sequence of events e.g. first, then, next - Extend and create ABAB patterns – stick, leaf, stick, leaf (Development Matters Non-statutory curriculum guidance) (Birthto5Matters) - Explores and adds to simple linear patterns of three repeating items, eg Stick, leaf, stone (ABC) (Birthto5Matters) - Joins in with simple patterns (ABCABCABC) in sounds, objects, dance and movement, predicting what comes next. (Birthto5Matters) | <ul style="list-style-type: none"> - Talk about the properties of shape, straight, round, pointy corners, flat, round, sides - Name the 4 basic 2d shapes - Combine shapes to make new ones – an arch, a bigger triangle (Development Matters) - Make comparisons between objects relating to size, length, weight and capacity. (Development Matters Non-statutory curriculum guidance) - Compare quantities such as more than and fewer than. (Development Matters) |

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|-------------|--|--------|--------------------------------|--|--|--------------------------------|------------------------|---------------------------------|------------------------------|--------------------------|----------------------|----------------------------|
| Autumn Term | Getting to know you Time to play and get to know the children. | | Match, sort and compare | | Talk about measure and patterns | | It's me 1, 2, 3 | | Circles and triangles | 1, 2, 3, 4, 5 | | Shapes with 4 sides |
| Spring Term | Alive in 5! | | Mass and capacity | Growing 6, 7, 8 | | Length, height and time | | Building 9 and 10 | | Explore 3D shapes | | |
| Summer Term | To 20 and beyond | | How many now? | Manipulate, compose and decompose | | Sharing and grouping | | Visualise, build and map | | Make Connections | Consolidation | |

* No ELG specifically related to Shape, Space and Measure in the new EYFS framework 2021. The Mathematics Educational Programme states, "to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures."

| Year 1 Scheme of learning | | | | | | | | | | | | |
|---------------------------|--|--------|--------|--|--------|--|--|--------|---|----------------------------|---------------------------------------|---------------|
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn Term | Number Place Value (Within 10) | | | | | Number Addition and subtraction (Within 10) | | | | | Geometry Shape | Consolidation |
| Spring Term | Number Place Value (Within 20) | | | Number Addition and subtraction (Within 20) | | | Number Place value (Within 50) | | Measurement Length and height | | Measurement Mass and Volume | |
| Summer Term | Number Multiplication and division | | | Number Fractions | | Geometry Position and direction | Number Place value (Within 100) | | Measurement Money | Measurement Time | | Consolidation |

| Year 2 Scheme of learning | | | | | | | | | | | | |
|---------------------------|------------------------------|--------|--|----------------------------|---|--------|------------|---|---|--|---------------|---------|
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn Term | Number Place value | | | | Number Addition and subtraction | | | | | Geometry Shape | | |
| Spring Term | Measurement Money | | Number Multiplication and division | | | | | Measurement Length and height | | Measurement Mass, capacity and temperature | | |
| Summer Term | Number Fractions | | | Measurement Time | | | Statistics | | Geometry Position and direction | | Consolidation | |

* The order of some units of work may change slightly in Key Stage 2 to enable teachers to match like objectives between different year groups within a class. Coverage will be complete by the end of each year.*

| Year 3 Scheme of learning | | | | | | | | | | | | |
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| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn Term | Number Place value | | | Number Addition and subtraction | | | | | Number Multiplication and division A | | | |
| Spring Term | Number Multiplication and division B | | | Measurement Length and perimeter | | | Number Fractions A | | | Measurement Mass and capacity | | |
| Summer Term | Number Fractions B | | Measurement Money | | Measurement Time | | | Geometry Shape | | Statistics | | Consolidation |

| Year 4 Scheme of learning | | | | | | | | | | | | |
|---------------------------|---|--------|----------------------|-------------------------------------|------------------------------------|---------------------|---------------|---------------------|---|----------------------|------------------------------------|---------------|
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn Term | Number Place value | | | | Number Addition and subtraction | | | Measurement Area | Number Multiplication and division A | | | Consolidation |
| Spring Term | Number Multiplication and division B | | | Measurement Length and perimeter | | Number Fractions | | | | Number Decimals A | | |
| Summer Term | Number Decimals B | | Measurement Money | | Measurement Time | | Consolidation | Geometry Shape | | Statistics | Geometry Position and direction | |

| Year 5 Scheme of learning | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |

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|-------------|--|---|--|--|--|------------------------------|
| Autumn Term | Number Place value | Number Addition and subtraction | Number Multiplication and division A | Number Fractions A | | |
| Spring Term | Number Multiplication and division B | Number Fractions B | Number Decimals and percentages | Measurement Perimeter and area | Statistics | |
| Summer Term | Geometry Shape | Geometry Position and direction | Number Decimals | Number Negative numbers | Measurement Converting units | Measurement Volume |

| Year 6 Scheme of learning | | | | | | | | | | | | |
|---------------------------|------------------------------|--------|---|---|--|--------|--|------------------------------|--|------------------------------|------------|--|
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn Term | Number Place value | | Number Addition, subtraction, multiplication and division | | | | | Number Fractions A | | Number Fractions B | | Measurement Converting units |
| Spring Term | Number Ratio | | Number Algebra | | Number Decimals | | Number Fractions, decimals and percentages | | Measurement Area, perimeter and volume | | Statistics | |
| Summer Term | Geometry Shape | | | Geometry Position and direction | Themed projects, consolidation and problem solving | | | | | | | |