SHOBNALL PRIMARY & NURSERY SCHOOL

MATHEMATICS PROGRAMME OF STUDY

RECEPTION LONG TERM OVERVIEW

RECEPTION MATHEMATICS LONG TERM OVERVIEW

AUTUMN TERM, SPRING TERM and SUMMER TERM

Week	Unit	Lesson titles	Domain
1	***Baseline – Getting to know you***		
2	***Baseline – Getting to know you***		
3	***Baseline – Getting to know you***		
4	***Match, sort and compare***	Step 1 – Match objects	Matching is a simple form of sorting and is the beginning of logical thinking. Through matching, children learn one-to-one correspondence.
		Step 2 – Match pictures and objects	Matching is a simple form of sorting and is the beginning of logical thinking. Through matching, children learn one-to-one correspondence. Matching objects to pictures develops children's understanding that objects can be represented by pictures.
		Step 3 – Identify a set	Identifying and making sets is a precursor to counting. Children need this for the basis of the counting principles of cardinality and one-to-one correspondence.
		Step 4 – Sort objects to a type	When children sort objects, they are learning that some things are alike, and some are different. Early experiences of sorting objects into groups according to their similarities helps children to learn how to categorise and is a precursor to classifying.
5		Step 5 – Explore sorting techniques	
		Step 6 – Create sorting rules	
		Step 7 – Compare amounts	Development Matters – Reception − Compare numbers.
	Talk about measure and pattern	Step 1 – Compare size	Development Matters – 3 and 4-year-olds – Make comparisons between objects relating to size, length, weight and capacity.
6		Step 2 – Compare mass	Development Matters – 3 and 4-year-olds – Make comparisons between objects relating to size, length, weight and capacity.
		Step 3 – Compare capacity	Development Matters – 3 and 4-year-olds – Make comparisons between objects relating to size, length, weight and capacity.
		Step 4 – Explore simple patterns	Development Matters − 3 and 4-year-olds – Talk about and identify the patterns around them.

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		Step 5 – Copy and continue simple patterns	Development Matters − Reception − Continue, copy and create repeating patterns.
7		Step 6 – Create simple patterns	Development Matters – Reception − Continue, copy and create repeating patterns.
	Consolidation		
	It's me 1,2,3	Step 1 – Find 1, 2 and 3	Development Matters – Reception – Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value.
		Step 2 – Subitise 1, 2 and 3	Development Matters – Reception – Subitise
8		Step 3 – Represent 1, 2 and 3	Development Matters – Reception – Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value.
		Step 4 – 1 more	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 5 – 1 less	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 6 – Composition of 1,2 and 3	Development Matters – Reception – Explore the composition of numbers to 10.
9	***Circles and triangles***	Step 1 – Identify and name circles and triangles	Development Matters – 3 and 4-year-olds – Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.
		Step 2 – Compare circles and triangles	Development Matters – 3 and 4-year-olds – Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.
		Step 3 – Shapes in the environment	Development Matters – 3 and 4-year-olds – Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.
		Step 4 – Describe position	Development Matters – 3 and 4-year-olds Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.

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10	***1,2,3,4,5***	Step 1 – Find 4 and 5	Development Matters – Reception – Link the number symbol (numeral) with its cardinal number value.
		Step 2 – Subitise 4 and 5	Development Matters − Reception – Subitise. Birth to 5 Matters − Range 6 − Engages in subitising numbers to four and maybe five.
		Step 3 – Represent 4 and 5	Development Matters − Reception – Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value.
		Step 4 – 1 more	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
11		Step 5 – 1 less	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 6 – Composition of 4 and 5	Development Matters – Reception – Explore the composition of numbers to 10.
		Step 7 – Composition of 1 -5	Development Matters – Reception – Explore the composition of numbers to 10.
	Shapes with 4 sides	Step 1 – Identify and name shapes with 4 sides	Development Matters − 3 and 4-year-olds − Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.
12		Step 2 – Cobine shapes with 4 sides	Development Matters − Reception − Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
		Step 3 – Shapes in the environment	Development Matters − Reception − 3 and 4-year-olds − Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.
		Step 4 – My day and night	Development Matters − 3 and 4-year-olds − Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
	Consolidation		
1	***Alive in 5***	Step 1 – Introduce zero	Development Matters − Reception − Link the number symbol (numeral) with its cardinal number value.

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		Step 2 – Find 0 - 5	Development Matters – Reception Link the number symbol (numeral) with its cardinal number value. Count objects, actions and sounds.
		Step 3 – Subitise 0 to 5	Development Matters – Reception – Subitise.
		Step 4 – Represent 0 to 5	Development Matters – Reception • Link the number symbol (numeral) with its cardinal number value. • Compare numbers.
2		Step 5 – 1 more	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 6 – 1 less	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 7 - Composition	Development Matters – Reception – Explore the composition of numbers to 10.
		Step 8 – Conceptual subitising to 5	Development Matters – Reception – Subitise.
3	***Growing 6, 7 and 8***	Step 1 – Find 6,7 and 8	Development Matters – Reception • Count objects, actions and sounds. • Link the number symbol (numeral) with its cardinal number value.
		Step 2 – Represent 6, 7 and 8	Development Matters − Reception Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value.
		Step 3 – 1 more	Development Matters – Reception – Understand the 'one more than/one less than' relationship between consecutive numbers
		Step 4 – 1 less	Development Matters – Reception – Understand the 'one more than/one less than' relationship between consecutive numbers
4		Step 5 – Composition of 6,7 and 8	Development Matters – Reception − Explore the composition of numbers to 10.
		Step 6 – Make pairs – odd and even	Development Matters – Reception – Explore the composition of numbers to 10.
		Step 7 – Doubles to 8 (find a double)	Development Matters – Reception – Explore the composition of numbers to 10

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		Step 8 – Doubles to 8 (make a double)	Development Matters – Reception – Explore the composition of numbers to 10
5		Step 9 - Combine 2 groups	Development Matters – Reception – Explore the composition of numbers to 10
		Step 10 – Conceptual subitising	Development Matters – Reception – Subitise.
	Consolidation		
	Length, time and heigh	Step 1 – Explore length	Development Matters − Reception − Compare length, weight and capacity.
6		Step 2 – Compare length	Development Matters − Reception − Compare length, weight and capacity.
		Step 3 – Explore height	Development Matters − Reception − Compare length, weight and capacity.
		Step 4 – Compare height	Development Matters − Reception − Compare length, weight and capacity.
		Step 5 – Talk about time	Development Matters – 3 and 4-year-olds − Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
7		Step 6 – Order and sequence time	Development Matters – 3 and 4-year-olds − Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
	Building 9 and 10	Step 1 – Find 9 and 10	Development Matters − Reception Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value.
		Step 2 – Compare numbers to 10	Development Matters − Reception − Compare numbers.
		Step 3 – Represent 9 and 10	Development Matters – Reception Count objects, actions and sounds. Link the number symbol (numeral) with its cardinal number value
8		Step 4 – Conceptual subitising to 10	Development Matters – Reception – Subitise.
		Step 5 – 1 more	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.
		Step 6 – 1 less	Development Matters – Reception − Understand the 'one more than/one less than' relationship between consecutive numbers.

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		Step 7 – composition to 10	Development Matters – Reception – Explore the composition of numbers to 10.
9		Step 8 – Bond to 10 (2 part)	Development Matters – Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
		Step 9 – Make arrangements of 10	Development Matters – Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
		Step 10 – Bonds to 10 (3 parts)	Development Matters – Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
		Step 11 – Doubles to 10 (find a double)	Development Matters − Reception − Explore the composition of numbers to 10.
10		Step 12 – Doubles to 10 (make a double)	Development Matters − Reception − Explore the composition of numbers to 10.
		Step 13 – Explore even and odd	Development Matters − Reception − Explore the composition of numbers to 10.
	Mass and capacity	Step 1 - Compare mass	Development Matters − Reception − Compare length, weight and capacity.
		Step 2 – Find a balance	Development Matters – Reception − Compare length, weight and capacity.
11		Step 3 – Explore capacity	Development Matters – Reception − Compare length, weight and capacity.
		Step 4 – Compare capacity	Development Matters – Reception − Compare length, weight and capacity.
	Consolidation		
	Explore 3-D shape	Step 1 – Recognise and name 3-D shapes	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills.
12		Step 2 – Find 2-D shapes within 3-D shapes	Development Matters − Reception − Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
		Step 3 – Use 3-D shapes for tasks	Development Matters − Reception • 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

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		Step 4 – 3-D shapes in the environment	Development Matters − 3 and 4-year-olds − 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'.
		Step 5 – Identify more complex patterns	Development Matters • 3 and 4-year-olds − Notice and correct an error in a repeating pattern. • Reception − Continue, copy and create repeating patterns.
1		Step 6 – Copy and continue patterns	Development Matters • 3 and 4-year-olds − Notice and correct an error in a repeating pattern. • Reception − Continue, copy and create repeating patterns.
		Step 7 – Patterns in the environment	Development Matters − Reception − Continue, copy and create repeating patterns.
	Consolidation		
	Consolidation		
2	***To 20 and beyond***	Step 1 – Build number beyond to 10 (10-13)	Development Matters − Reception − Count beyond ten.
		Step 2 – Continue patterns beyond 10 (10-13)	Development Matters − Reception − Count beyond ten.
		Step 3 – Build numbers beyond 10 (14-20)	Development Matters − Reception − Count beyond ten.
		Step 4 – Continue patterns beyond 10 (14-20)	Development Matters − Reception − Count beyond ten.
3		Step 5 – Verbal counting beyond 20	Development Matters − Reception − Count beyond ten.
		Step 6 – Verbal counting patterns	Development Matters − Reception − Count beyond ten.
	How many now?	Step 1 – Add more	Development Matters − Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
		Step 2 – How many did I add?	Development Matters − Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
4		Step 3 – Take away	Development Matters − Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
		Step 4 – How many did I take away?	Development Matters − Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
	Consolidation		

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	Manipulate, compose and decompose	Step 1 – Select shapes for purpose	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills.
5		Step 2 – Rotate shapes	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills.
		Step 3 – Manipulate shapes	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills.
		Step 4 – Explain shape arrangement	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills
		Step 5 – Compose shapes	Development Matters − Reception − Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
6		Step 6 – Decompose shapes	Development Matters − Reception − Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
		Step 7 – Copy 2-D shape pictures	Development Matters − Reception − Select, rotate and manipulate shapes to develop spatial reasoning skills.
		Step 8 – Find 2-D shapes within 3-D shapes	Development Matters − Reception − Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
	Sharing and grouping	Step 1 – Explore Sharing	Development Matters − Reception Compare numbers. Explore the composition of numbers to 10.
7		Step 2 - Sharing	Development Matters − Reception Compare numbers. Explore the composition of numbers to 10.
		Step 3 – Explore grouping	Development Matters − Reception Compare numbers. Explore the composition of numbers to 10.
		Step 4 – Grouping	Development Matters − Reception Compare numbers. Explore the composition of numbers to 10.
		Step 5 – Even and odd sharing	Development Matters − Reception Compare numbers. Explore the composition of numbers to 10.
8		Step 6 – Play with and build doubles	Development Matters − Reception − Automatically recall number bonds for numbers 0–5 and some to 10.
	Visualise, build and map	Step 1 – Identify units of repeating patterns	Development Matters − Reception − Continue, copy and create repeating patterns.

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		Step 2 – Create own pattern rules	Development Matters − Reception − Continue, copy and create repeating patterns.
		Step 3 – Explore own pattern rules	Development Matters − Reception − Continue, copy and create repeating patterns.
9		Step 4 – Replicate and build scenes and constructions	Development Matters − 3 and 4-year-olds Discuss routes and locations, using words like 'in front of' and 'behind'.
		Step 5 – Visualise from different positions	Development Matters − 3 and 4-year-olds Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.
		Step 6 – Describe positions	Development Matters − 3 and 4-year-olds Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'
		Step 7 – Give instructions to build	Development Matters − 3 and 4-year-olds − Understand position through words alone – for example, "The bag is under the table," – with no pointing.
10		Step 8 – Explore mapping	Development Matters − 3 and 4-year-olds Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.
		Step 9 – Represent maps with models	Development Matters − 3 and 4-year-olds Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.
		Step 10 – Create own maps from familiar places	Development Matters − 3 and 4-year-olds Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
	Make connections	Step 1 – Deepen understanding	
11		Step 2 – Pattern and relationships	
	Consolidation		
	Consolidation		

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	Consolidation
12	***Consolidation***
	Consolidation
	Consolidation
	Consolidation