

Maths curriculum overview

Nursery	AUTUMN 1						AUTUMN 2			
Strand	Comparison		Shape, Space and Measure		Pattern	Counting		Counting		Subitising
Learning	More than, fewer than, same		Explore and build with shapes and objects		Explore repeats	Hear and say number names		Begin to order number names		I see 1, 2, 3
Learning objectives	Collect objects to compare amounts. Make simple comparisons of amounts. Look for collections of large and small amounts. Compare and talk about large and small amounts. Make large and small collections. Make collections of the same.		Explore and play with shapes. Show interest in simple differences between shapes. Put shapes and blocks into position. Select shapes for a reason. Begin to explore and describe natural shapes and objects. Look for collections of large and Find and collect objects for a purpose.		Listen to repeats in songs and stories. Start to join in songs with repeats. Start to join in with repeats from stories. Clap along to songs. Make line patterns with own sequences. Choose blocks to build roads and towers.	Hear some number names. Join in saying some number names. Model saying number names in order. Practice saying number names in order. Join in stable order counting forward. Join in stable order counting backwards.		Model saying 1, 2, and 3 in play. Copy the sequence of 1, 2 and 3. Copy fingers to represent 1, 2 and 3. Begin to count actions. Say number names in order. Begin to recognise that anything can be counted.		Notice images in books. Respond to "I see 1, 2, 3" Recognise "I see 1, 2, 3" Copy "I see 1, 2, 3" Point to 1, 2, 3. Recognise 1, 2, 3 in well-known tales.
	SPRING 1						SPRING 2			
Strand	Pattern	Shape, Space and Measure	Subitising	Counting	Shape, space and measure	Pattern	Counting	Shape, space and measure	Subitising	Comparison
Learning	Join in with repeats	Explore position and space	Show me 1, 2, 3	Move and label 1, 2, 3	Explore position and routes	Explore patterns	Take and give 1, 2, 3	Match, talk, push and pull	Talk about dots	Compare and sort collections
Learning objectives	Join in with repeated actions in songs. Join in with repeats in songs and stories. Sing some refrains independently. Have a sense of daily routines. Say what happens next. Make arrangements in art.	Respond to simple language of position. Arrange blocks in a chosen position. Select shapes for a space. Recognise when 2 objects are the same shape. Explore and describe shapes and objects. Sort shapes and objects into simple categories.	Copy fingers to show 1. Copy fingers to show 2. Copy fingers to show 3. Show 1 finger when seeing 1 item in stories. Show 2 or 3 fingers when seeing 2 or 3 in stories. Show 1, 2, 3 on fingers when asked.	Make actions when saying counting words. Move fingers when saying counting words. Count out up to 3 objects from rhymes. Notice number symbols as labels. Label amounts as 1 and not 1. Label amounts as 1, 2, 3.	Explore shape resources. Explore more complex inset jigsaws. Talk about simple positions. Move into simple positions. Move through positions. Follow simple small-world routes.	Explain simple pattern arrangements. Make roads and bridges with intent. Choose blocks to copy simple creations. Make simple line patterns with objects. Make simple pattern arrangements. Show an interest in patterns and shapes.	Choose a group to count. Take out 2 from a group. Take out 3 from a group. Give others 2 items. Give others 3 items. Count 3 objects with 1:1 correspondence.	Match simple shapes. Push some shapes and blocks together. Make simple arrangements. Talk about arrangements. Follow simple routes outside. Follow toys around a simple route.	Become familiar with dot patterns. Say when there is 1 dot. Say when there are 2 dots. Recognise 1 and 2 in different arrangements. Say when there are 3 dots. Recognise 1, 2 and 3 in different arrangements.	Notice when 2 collections are the same. Make collections of small objects the same. Make collections of large objects the same. Recognise two collections are the same using large and small objects. Make collections the same using small and large objects. Sort and talk about their own collections.
	SUMMER 1						SUMMER 2			
Strand	Pattern		Shape, space and measure	Pattern		Subitising	Counting	Pattern	Counting	Comparison
Learning	Lead on own repeats		Start to puzzle	Making patterns together		Make games and actions	Show me 5	My own pattern	Stop at 1, 2, 3, 4, 5	Match, sort, compare
Learning objectives	Join in fully with sequences and songs. Sing rhymes independently. Lead sequences and songs. Read on in familiar repeating stories, Copy art-based simple patterns. Explore own line and repeating patterns in art.		Complete shape-match puzzles. Complete simple jigsaws. Match objects to pictures. Match objects to shadows. Explore objects and small world from different positions. Make simple routes in small world with lines and curves.	Sing their own songs independently. Clap in time to a beat. Make and talk about movement patterns. Talk about objects in patterns and arrangements. Copy AB patterns with support. Continue AB patterns with support.		Match dot patterns. Be introduced to subitising games. Play subitising games. Copy sets of sounds. Listen to and represent sounds with fingers. Listen to and represent sounds with resources.	Sing rhymes to 5 and join in with movements. Move props to 5. Move props back from 5. Show fingers to 5. Begin to count 5 objects with one-to-one correspondence. Match numerals to quantities when acting out songs.	Continue AB patterns. Create their own AB patterns. Notice an error in a patterns. Build constructions with simple enclosures. Copy simple repeated constructions. Begin to sequence some events.	Count out up to 5 objects from a larger group. Explore counting to 5 in different ways. Verbally count to a given number. Label objects with numerals. Independently show fingers to 5. Begin to make marks to represent quantities.	Compare up to 5 different objects. Compare by matching. Make the same set by matching. Match by type. Recognise attributes of objects. Begin to sort some objects to a type.

Reception	AUTUMN 1				AUTUMN 2		
Strand	Comparison	Shape, space and measure and pattern	Subitising and counting.		Shape, space and measure	Counting	Shape, space and measure
Learning	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
Learning objectives	Match objects. Match pictures and objects. Identify a set. Sort objects to a type. Explore sorting techniques. Create sorting rules. Compare amounts.	Compare size. Compare mass. Compare capacity. Explore simple patterns. Copy and continue a simple pattern. Create simple patterns.	Find 1, 2 and 3. Subitise 1, 2, and 3. Represent 1, 2 and 3. 1 more. 1 less. Composition of 1, 2 and 3.		Identify and name circles and triangles. Compare circles and triangles, Shapes in the environment. Describe position.	Find 4 and 5. Subitise 4 and 5. Represent 4 and 5. 1 more. 1 less. Composition of 4 and 5. Composition of 1-5.	Identify and name shapes with 4 sides. Combine shapes with 4 sides. Shapes in the environment. My day and night.
	SPRING 1				SPRING 2		
Strand	Subitising and counting	Shape, space and measure	Comparison	Shape, space and measure	Subitising, counting and comparison	Shape, space and measure and pattern	
Learning	Alive in 5	Mass and capacity	Growing 6, 7, 8	Length, height and time	Building 9 and 10	Explore 3D shapes	
Learning objectives	Introduce zero. Find 0 to 5. Subitise 0 to 5. Represent 0 to 5. 1 more. 1 less. Composition. Conceptual subitising.	Compare mass. Find a balance. Explore capacity. Compare capacity.	Find 6, 7 and 8. Represent 6, 7 and 8. 1 more. 1 less. Composition of 6, 7 and 8. Make pairs – odd and even. Double to 8 (find a double). Double to 8 (make a double).	Explore length. Compare length. Explore height. Compare height. Talk about time. Order and sequence time.	Find 9 and 10. Compare numbers to 10. Conceptual subitising to 10. 1 more. 1 less. Composition to 10. Bonds to 10 (2 parts). Make arrangements to 10. Bonds to 10 (3 parts). Doubles to 10 (find a double). Doubles to 10 (make a double). Explore odd and even.	Recognise and name 3D shapes. Find 2D shapes within 3D shapes. Use 3D shapes for tasks. 3D shapes in the environment. Identify more complex patterns. Copy and continue patterns. Patterns in the environment.	
	SUMMER 1				SUMMER 2		
Strand	Counting	Counting	Shape, space and measure	Comparison	Shape, space and measure and pattern	Counting and pattern	
Learning	To 20 and beyond	How many now?	Manipulate, compose and decompose	Sharing and grouping	Visualise, build and map	Make connections	
Learning objectives	Build numbers beyond 10 (10-13). Continue patterns beyond 10 (10-13). Build numbers beyond 10 (14-20). Continue patterns beyond 10 (14-20). Verbal counting beyond 20. Verbal counting patterns.	Add more. How many did I add? Take away. How many did I take away?	Select shapes for a purpose. Rotate shapes. Manipulate shapes. Explain shape arrangements. Compose shapes. Decompose shapes. Copy 2D shape pictures. Find 2D shapes within 3D shapes.	Explore sharing. Sharing. Explore grouping. Grouping. Even and odd sharing. Play with and build doubles.	Identify units of repeating patterns. Create own pattern rules. Explore own pattern rules. Replicate and build scenes and constructions. Visualise from different positions. Describe positions. Give instructions to build. Explore mapping. Represent aps with models. Create own maps from familiar places. Create own maps and plans from story situations.	Deepen understanding. Patterns and relationships.	

	Year 1	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	Strand	Number			Number			Geometry					
	Learning	Place value (within 10)			Addition and subtraction (within 10)			Shape					
	Learning objectives	Sort objects. Count objects. Count objects from a larger group. Represent objects. Recognise numbers as word. Count on from any number. 1 more. Count backwards within 10. 1 less. Compare groups by matching. Fewer, more, same, Less than, greater than, equal to. Compare numbers. Order objects and numbers. The number line.			Introduce parts and wholes. Part-whole model Write number sentences. Fact families – addition facts. Number bonds within 10. Systematic number bonds within 10. Number bonds to 10. Addition – add together. Addition – add more. Addition problems. Find a part. Subtraction – find a part. Fact families – the eight facts. Subtraction – take away/cross out (How many left?). Subtraction – take away (How many left?). Subtraction on a number line.			Recognise and name 3-D shapes. Sort 3-D shapes. Recognise and name 2-D shapes. Sort 2-D shapes. Patterns with 2-D and 3-D shapes.					
Spring	Strand	Number		Number		Number		Measurement		Measurement			
	Learning	Place value (within 20)		Addition and subtraction (within 20)		Place value (within 50)		Length and height		Mass and volume			
	Learning objectives	Count within 20. Understand 10. Understand 11, 12 and 13. Understand 14, 15 and 16. Understand 17, 18 and 19. Understand 20. 1 more and 1 less. The number line to 20. Use a number line to 20. Estimate on a number line to 20. Compare numbers to 20. Order numbers to 20.		Add by counting on within 20. Add ones using number bonds. Find and make number bonds to 20. Doubles. Near doubles. Subtract ones using number bonds. Subtraction – counting back. Subtraction – finding the difference. Related facts. Missing number problems.		Count from 20 to 50. 20, 30, 40 and 50. Count by making groups of tens. Groups of tens and ones. Partition into tens and ones. The number line to 50. Estimate on a number line to 50. 1 more, 1 less.		Compare lengths and heights. Measure length using objects. Measure length in centimetres.		Heavier and lighter. Measure mass. Compare mass. Full and empty. Compare volume. Measure capacity. Compare capacity.			
Summer	Strand	Number		Number	Geometry	Number		Measurement	Measurement				
	Learning	Multiplication and division		Fractions	Position and Direction	Place value (within 10)		Money	Time				
	Learning objectives	Count in 2s. Count in 10s. Count in 5s. Recognise equal groups. Add equal groups. Make arrays. Make doubles. Make equal groups – grouping. Make equal groups – sharing.		Recognise a half of an object or a shape. Find a half of an object or a shape. Recognise a half of a quantity. Find a half of a quantity. Recognise a quarter of an object or a shape. Find a quarter of an object or a shape. Recognise a quarter of a quantity. Find a quarter of a quantity.	Describe turns Describe position – left and right. Describe position – forwards and backwards. Describe position – above and below. Ordinal numbers	Count from 50 to 100. Tens to 100. Partition into tens and ones. The number line to 100. 1 more, 1 less. Compare numbers with the same number of tens. Compare any two numbers.		Unitising. Recognise coins. Recognise notes. Count in coins.	Before and after. Days of the week. Months of the year. Hours, minutes and seconds. Tell the time to the hour. Tell the time to the half hour.				

	Year 2	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	Strand	Number				Number				Geometry			
	Learning	Place value				Addition and subtraction				Shape			
	Learning objectives	Numbers to 20. Count objects to 100 by making 10s. Recognise tens and ones. Use a place value chart. Partition numbers to 100. Write numbers to 100 in words. Flexibly partition numbers to 100. Write numbers to 100 in expanded form. 10s on the number line to 100. 10s and 1s on the number line to 100. Estimate numbers on a number line. Compare objects. Compare numbers. Order objects and numbers. Count in 2s, 5s and 10s. Count in 3s.				Bonds to 10. Fact families - addition and subtraction bonds within 20. Related facts. Bonds to 100 (tens). Add and subtract 1s. Add by making 10. Add three 1-digit numbers. Add to the next 10. Add across a 10. Subtract across 10. Subtract from a 10. Subtract a 1-digit number from a 2-digit number (across a 10). 10 more, 10 less. Add and subtract 10s. Add two 2-digit numbers (not across a 10). Add two 2-digit numbers (across a 10). Subtract two 2-digit numbers (not across a 10). Subtract two 2-digit numbers (across a 10). Mixed addition and subtraction. Compare number sentences. Missing number problems.				Recognise 2-D and 3-D shapes. Count sides on 2-D shapes. Count vertices on 2-D shapes. Draw 2-D shapes. Lines of symmetry on shapes. Use lines of symmetry to complete shapes. Sort 2-D shapes. Count faces on 3-D shapes. Count edges on 3-D shapes. Count vertices on 3-D shapes. Sort 3-D shapes. Make patterns with 2-D and 3-D shapes.			
Spring	Strand	Measurement		Number				Measurement		Measurement			
	Learning	Money		Multiplication and Division				Length and Height		Mass, Capacity and Temperature			
	Learning objectives	Count money – pence. Count money – pounds (notes and coins). Count money – pounds and pence. Choose notes and coins. Make the same amount. Compare amounts of money. Calculate with money. Make a pound. Find change. Two-step problems.		Recognise equal groups. Make equal groups. Add equal groups. Introduce the multiplication symbol. Multiplication sentences. Use arrays. Make equal groups – grouping. Make equal groups – sharing. The 2 times-table. Divide by 2. Doubling and halving. Odd and even numbers. The 10 times-table. Divide by 10. The 5 times-table. Divide by 5. The 5 and 10 times-tables.				Measure in centimetres. Measure in metres. Compare lengths and heights. Order lengths and heights. Four operations with lengths and heights.		Compare mass. Measure in grams. Measure in kilograms. Four operations with mass. Compare volume and capacity. Measure in millilitres. Measure in litres. Four operations with volume and capacity. Temperature.			
Summer	Strand	Number			Measurement			Statistics		Geometry		Consolidation	
	Learning	Fractions			Time					Position and Direction			
	Learning objectives	Introduction to parts and whole. Equal and unequal parts. Recognise a half. Find a half. Recognise a quarter. Find a quarter. Recognise a third. Find a third. Find the whole. Unit fractions. Non-unit fractions. Recognise the equivalence of a half and two-quarters. Recognise three-quarters. Find three-quarters. Count in fractions up to a whole.			O'clock and half past. Quarter past and quarter to. Tell the time past the hour. Tell the time to the hour. Tell the time to 5 minutes. Minutes in an hour. Hours in a day.			Make tally charts. Tables. Block diagrams. Draw pictograms (1–1). Interpret pictograms (1–1). Draw pictograms (2, 5 and 10). Interpret pictograms (2, 5 and 10).		Language of position. Describe movement. Describe turns. Describe movement and turns. Shape patterns with turns.			