Reception – Maths Long Term Plan

Mathematics
Number ELG
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.
Numerical Patterns ELG
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.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	Getting to know you		Match, sort and compare		Talk about measure and patterns		Circles and triangles
Autumn 1	**Teacher baselines and Reception Baseline Assessments** **Concepts andactivities**: Get to know the children and assess their entry level of maths concepts. Activities to include counting, numeral recognition, shape recognition, colour recognition, finding one more and one less. **Continuous provision:** 2d shapes, numeral cards, numicon shapes and pegs, cubes to count, shape cutters for playdough, washing line and fabric numbers to peg. **Rhymes/Stories:** Counting songs e.g. 10 in the bed, 5 little monkeys, 1,2,3,4,5, and 1,2, buckle my shoe		**Focus: Match objects Sort into groups** **Concepts and activities**: Recognise matching pictures and objects. Sort using different criteria including size and colour. **Continuous provision:** Game of pairs, paper plates and sets of food, Numicon shapes to match, items and set rings for sorting.	**Focus:** Comparing amounts More and fewer **Concepts and activities**: Understand the concepts of more and fewer. Compare groups and amounts. **Link to calendar time:** More or fewer children in class today? **Continuous provision:** items and set rings to create groups to compare, cubes to build towers to compare **Rhymes/Stories:** 5 little ducks (1 fewer) 1 elephant went out to play (1 more)	**Focus:** Compare size, weight and capacity **Concepts and activities**: Use mathematical language to make comparisons e.g. heavier, lighter, biggest, full, empty. **Link to calendar time:** longer and shorter names chosen for line leader **Continuous provision:** basket of objects to compare weight, different sized boxes and objects to fit inside, size ordering activity and sectioned trays. **Rhymes/Stories:** Titch	**Focus:** Repeating patterns **Concepts and activities**: Recognise, continue and create repeating patterns **Link to calendar time:** Shape repeating pattern **Continuous provision:** Washing line with shapes to peg, cubes and pattern cards, peg boards, compare bears and pattern cards, train pattern game (Topmarks) **Rhymes/Stories:** One finger, one thumb **Numberblocks** **S3 E17 Pattern Palace**	**Focus:** Circles and Triangles**.** **Concepts and activities:** Recognise and describe the properties of triangles and circles. Be able to find them in the environment. **Continuous provision:** Kandinsky's Circles andTriangles images, triangles and circles to cut and stick, feely bag with circles and triangles,

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	It's me, 1,2,3!			**1,2,3,4,5**			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Alive in 5	**Mass**	**Capacity**	**Length and Time**	**Growing 6,7,8**	
Spring 1	**Focus: Introduce** 0. Comparing numbers to 5 using more and fewer. **Concepts**: Quantities same/more/fewer than. Equal and unequal groups. Introducing part, part,whole method. **Link to calendar time:** Counting the number of children and comparing to the previous day **Continuous provision:** 10 frame bus and people, toy animals split between 2 fields, double sided counters, numbered skittles **Rhymes/Stories:** The Ugly Five NumberblocksS3 E5 Zero. S3 E3 The NumberblocksExpress S1 E12 The Wholeof Me S1 E14 Holes	**Focus: Measuring and comparing mass** **Concepts and activities**: Using scales to compare weight: heavier and lighter. Use non-standard units to find weights of items. Weighing numicon shapes. **Continuous provision:** Balance scales, wrapped parcels of different weights, numicon shapes and bucket scales. **Rhymes/Stories:**	**Focus: Measuring and comparing capacity** **Concepts and activities**: Using containers to compare capacity: empty, half-full, full Use cups and water/sand to find capacity of larger containers. **Continuous provision:** Jugs and cups in the water tray and sandpit, making magic potions and ordering them by capacity, making salt dough. **Rhymes/Stories:** ***Clip: Mary Poppin's bag***	**Focus: Length andheight Time – Days of theweek** **Concepts and activities:** Describe length and height (taller, shorter,longer, shorter) Measuring height Measuring time (1 minute) Make direct comparisons. Days of the week **Link to calendar time:** Days of the week and months of the year songs **Continuous provision:** Dice and cubes to build and compare tower lengths, lengths of ribbon, Jaspar's **Rhymes/stories:** Titch, The Giraffe who got a knot, Jasper's Beanstalk	**Focus: Introduce 6, 7, 8.** **Concepts and activities**: Subitising, comparing,part-part-whole of 6,7,8. Introduce tens frame **Link to calendar time:** Counting children, counting sides on shapes **Continuous provision:** Dominoes, Part/whole templates and double sided counters, Ladybird game, Numicon shapes and pegs to stack number bonds. **Rhymes/stories:** Six Dinner Sid NumberblocksS2 E1 Six S2 E2 SevenS2 E3 Eight	**Focus: Matching6,7,8. Combining groups and adding more. Exploring odd and even numbers** **Concepts and activities**: Matching 6,7,8 in different representations. Spotting one left overand 'odd'. Using numicon to add two groups **Link to calendar time:** Counting children, counting sides on shapes, looking at odd and even numicon shapes **Continuous provision:** 10 frames, numeral cards and objects to count and combine. Beadstrings. 6.7.8 bingo game. **Rhymes/stories:** Kipper's Toy Box Numberblocks S2 E6 Just Add One NumberblocksS2 E12 FluffiesS2 E9 Double Trouble

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Building 9 and 10		**3d shapes**		**Consolidation**	
Spring 2	**Focus: 9 and 10** **Concepts and activities:** Comparing, representing, sorting up to 9 and 10. Ordering numerals to 10. Composition of 9 and 10. **Link to calendar time:** Counting the number of children and comparing to the previous day **Continuous provision:** Interactive 10 frame, beadstrings, teddies and objects to share, numeral matching games, talk about number 10 poster **Rhymes/Stories:** Ten in a bed Ten Green Bottles Numberblocks S2 E4 Nine S2 E5 Ten S2 E10 The Three Threes S3 E10 Hiccups	**Focus: 9 and 10.** **Comparing numbers to 10** **Concepts and activities:** Counting,comparing,sortingup to 10. Use of numberlines. Composition of 10. Bonds to 10 (partitioning)Counting forwards and backwards to 10. Doubles to 10. **Link to calendar time:** Counting the number of children, finding odd and even Numicon shapes **Continuous provision:** Sharing 10 (pond activity), dice to 10 with 10 frames and counters, Numicon to stack to find bonds to 10 **Rhymes/stories:** Number bond song Numberblocks S2 E7 Blast Off S2 E7 Ten Green BottlesS3 E6 Now We Are 6-10	**Focus: 3D shape** **Concepts and activities:** Names of 3D shapes. Can describe similarities and differences. Some 3D shape features – curved, flat. Identifying shapes in real objects. **Link to calendar time:** Repeating 3d shape patterns **Continuous provision:** 3d shapes to roll, stack and print faces in playdough, building challenge cards, 'Falling shapes' game on computer **Rhymes/stories:** We're going on a shape hunt Numberblocks S3 E17 Pattern Palace	**Focus: 3D shape properties** **Concepts and activities:** Names and properties of 3d shapes. Finding 2d shapes within 3d shapes. Making patterns with 3d shapes. **Link to calendar time:** Repeating 3d shape patterns **Continuous provision:** Nrich building with shapes challenge, 3d shapes in feely bag, 3d shape hunt, 3d shape nets to explore **Rhymes/stories:** I spy Numberblocks S3 E8 Building Blocks	**Focus: Consolidating** **Concepts and activities:** Length and Height Repeating patterns 3d shape names **Link to calendar time:** Repeating 2d and 3d shape patterns **Continuous provision:** 3d threading shapes, compare bears and pattern cards, nature pattern cards **Rhymes/stories:** Banana, banana, meatball	**Focus: Consolidating** **Concepts and activities:** Ordering and comparing numbers Finding one more and one less to 10 **Link to calendar time:** Number of the day, counting children in class **Continuous provision:** Number tracks with missing numbers, Numicon shapes and pegs, washing line and numbers to peg, numbers to 10 jigsaws, numbers to thread, numbers to fish in the water tray **Rhymes/stories:** One is a snail, ten is a crab Numberblocks S3 E13 Five and Friends S2 E15 Numberblock CastleS3 E18 The Legend of Big Tum

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
	To 20 and Beyond			How many now?		Manipulate, compose and decompose	
Summer 1	**Focus: Building numbers beyond 10** **Concepts and activities:** Number patterns to 20 (numbers 1-9 repeat after every full ten) Beyond 20 on tens frame. Matching pictures and numerals. Ordering teen numbers. **Link to calendar time:** Counting the number of children and comparing to the previous day **Continuous provision:** Numicon, beadstrings, multilink cubes, numeral matching games, number cards. **Rhymes/Stories:** Jack Haartman – count to 20 Numberblocks S3 E23 Ride the Rays	**Focus: Counting Patterns beyond 10** **Concepts and activities:** Visual representations upto 20. Missing numbers on a number line. Finding and ordering numbers to 20. **Link to calendar time:** Counting the number of children and comparing to the previous day **Continuous provision:** Numicon, beadstrings, multilink cubes, numeral matching games, numbered carpet tiles. **Rhymes/Stories:** Jack Haartman – count to 20 Numberblocks S5 Ten Vaulting S3 E22 Block Star	**Focus: Counting Patterns beyond 10** **Concepts and activities:** Counting with 1:1 correspondence to 20. Placing numbers on a number line. Recognising and ordering numbers to 20 **Link to calendar time:** Counting the number of children and comparing to the previous day **Continuous provision:** Numicon, beadstrings, teen numbers bingo, numeral matching games, 20 sided dice. **Rhymes/Stories:** Jack Haartman – count to 20 Numberblocks S3 E28 Tween Scenes S3 E30 Step Squads S4 Fifteen's Minute ofFame S4 On Your Head	**Focus: Adding More** **Concepts and activities:** First, then, now stories.Counting on from a number. Adding more – unknown 'then' Adding more – 'first' unknown **Link to calendar time:** Counting the number of children and comparing to the previous day – how many more/ fewer? **Continuous provision:** Numicon, cube towers, first/ then/ now templates, dice and counters **Rhymes/stories:** One elephant went out to play Numberblocks S4 Tens Place S4 Balancing Bridge S4 Square Club	**Focus: Taking Away** **Concepts and activities:** First, then, now story. Taking away with unknown'then'. Counting back from a number. Playing games with numbers decreasing. **Link to calendar time:** Counting the number of children and comparing to the previous day – how many more/ fewer? **Continuous provision:** Numicon, cube towers, first/ then/ now templates, dice and counters. Nrich incy wincy game, bus 20 frames and wooden people. **Rhymes/stories:** 10 fat sausages 10 in the bed Numberblocks S4 Loop the Loop S4 Tall Stories S4 Flights of Fancy S4 I Can Count to Twenty	**Focus: SpatialReasoning – match, rotate and manipulate** **Concepts and activities:**Making new shapes using right angled triangles, squares and triangles. Tangrams with 2d shapes. Creating pictures with 2d shapes. **Link to calendar time:** Repeating shape patterns using 2d shapes **Continuous provision:** 2d shapes, shapes to cut and stick, minibeast shape pictures, tangram game, shape spot the difference **Rhymes/stories:** Grandpa's Quilt Numberblocks S6 Shape party	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Sharing and Grouping		**Visualise, build and map**		**Make connections**	
Summer 2	**Focus: Doubling** **Concepts and activities:** Doubling is 'twice as many' Building doubles with real objects Doubling using tens frames, mirrors and barrier games "Double 2 is 4" **Link to calendar time:** Shape pattern – counting the sides and doubling **Continuous provision:** Ladybird templates, double dominoes, dice, Numicon butterflies **Rhymes/Stories:** The story of Alison Hubble **Numberblocks** **S3 E19 Mirror, Mirror** **S4 Heist** **S2 Double trouble**	**Focus: Sharing and grouping** **Concepts and activities:** Sharing equally between setnumber of people. Making equal groups of setobjects. Fair and unfair sharing – odd and even numbers **Link to calendar time:** Odd and even numbers **Continuous provision:** Nrich share bears problem, Pirate treasure to share, cubes and number cards, set rings and plates for sharing **Rhymes/Stories:** The Doorbell Rang Even Steven and Odd Todd **Numberblocks** **S4 The Lair of Shares** **S4 Terrible Twosday S2 E11 Odds and Evens**	**Focus: Positional language** **Concepts and activities:** Using correct positional terms to describe where objects are and be able to place items accordingly. **Link to calendar time:** Where is Fred? – Children to say where he is in the classroom. **Continuous provision:** Items to place – beanbags, bugs, compare bears. Visuals to show key positions and positional language. **Rhymes/Stories:** Dogger **Numberblocks** **S6 On the way to Numberblock fair**	**Focus: Spatial Reasoning** **Concepts and activities:** Making maps of journeys (obstacle courses, familiar journeys they go on, from stories) **Link to calendar time:** Where is Fred? – Children to say where he is in the classroom. **Continuous provision:** Pirate treasure maps, aerial pictures of the local area, story maps, my journey to school activity, counting treasure trail **Rhymes/Stories:** Little Red Riding Hood We're off to look for treasure! Bear Hunt **Numberblocks** **S6 Octoblock and the oath of justice**	**Focus: Patterns and Relationships** **Concepts and activities:** Number bonds to 5/10. Exploring bonds using manipulatives. Finding patterns – beginning to be systematic. **Link to calendar time:** Number of the day **Continuous provision:** Ten frames, part/whole models, Numicon to stack bonds, beadstrings, number fans, cuisinere rods **Rhymes/Stories:** One is a snail, 10 is a crab Number bonds to 10 rhyme **Numberblocks** **S3 Numberblocks express** **S3 Fruit salad** **S2 Blast Off**	**Focus: Problem Solving** **Concepts and activities:** Solve problems using storiesand scenarios. Find one more/ one less. Find totals. Find missing numbers within number lines and patterns. **Link to calendar time:** Number of the day **Continuous provision:** Missing numbers game, 20 sided dice, domino car park game, beadstrings, Numicon to thread, number washing line **Rhymes/Stories:** Harry and his Bucketful of Dinosaurs One more sheep Two ways to count to 10 **Numberblocks** **S2 The two tree** **S3 Blockzilla**