

EYFS

2021-2022 Long Term Plan

Mathematics ELG: Number

Children at the expected level of development will: - 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.

Mathematics ELG: Numerical Patterns

Children at the expected level of development will: - 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.

Overview 2020/21



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me!			It's Me 1 2 3!			Light and Dark			Consolidation	
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation				
Summer	To 20 and Beyond			First then Now			Find my Pattern			On the Move				

Term	Maths
	EYFS
Autumn 1 7 weeks	<p>Home Visits (1 week)</p> <p>Getting to know you (2 weeks)</p> <p>Match and sort (1 week)</p> <p>Compare amounts (1 week)</p> <p>Compare size, mass and capacity (1 week)</p> <p>Exploring pattern (1 week)</p>
Autumn 2 7 weeks	<p>Representing 1,2,3, Comparing 1,2,3, Composition 1,2,3 (2 weeks)</p> <p>Incl - Circles and triangles</p> <p>Representing numbers to 5 & One more and one less (2 week)</p> <p>Shapes with 4 sides & Positional language (1 week)</p> <p>Time – Night and day (1 week)</p> <p>Consolidation (1 week)</p>
Spring 1 6 weeks	<p>Introducing zero (1 week)</p> <p>Representing, comparing, composition 4&5 (1 week)</p> <p>6,7,8 (1 week)</p> <p>Making pairs (1 week)</p> <p>Comparing mass & capacity (1 week)</p> <p>Length & height (1 week)</p>

Term	Maths
	EYFS
Spring 2 6 weeks	Combing two groups (1 week) Time (1 week) 9&10 and Comparing numbers to 10 (1 week) Number bonds to 10 (1 week) 3D shape (1 week) Pattern (1 week)
Summer 1 6 weeks	Counting beyond 10 / Counting patterns beyond 10 (2 weeks) Spatial reasoning, match, rotate, manipulate & compose and decompose (1 week) Adding more / number stories (1 week) Taking away (2 week)
Summer 2 7 weeks	Doubling (1 week) Sharing & Grouping (1 week) Even and Odd (1 week) Deepening Understanding & Patterns and Relationships (1 week) Spatial Reasoning Visualise and Build & Mapping (1 week) Consolidation (2 weeks)

EYFS

2021-2022

Medium Term Plan

Week	Maths Autumn Term 1		
	Themes	Key questions	Activities
A1 W1 3/9/20	Home Visits	Home Visits	
A1 W2-W3 7/9/20	Getting to know you	Opportunities for settling in, introducing the areas of provision, getting to know the children.	Key times of day, class routines. Exploring the continuous provision inside and out. Where do things belong? Positional Language.
A1 W4 14/9/20	Match and sort Noah's Ark (Match) Monkey Puzzle (Match)		<p>Sort - *Line up if you have black hair, Velcro shoes etc., *Can you sort these items, how else can we sort them? Real objects *In pairs can you sort these? How have we sorted them differently. *I've sorted these items, guess how I've sorted them? *Which one does not belong? Odd one out? *Group of children at front and sort into two groups. – different ways? *How can we sort numeral, pictures and dot patterns?</p> <p>Match - *Same hunt. Can you find and match objects that are the same? How do you know? Can you find one different to mine? How do you know? (numicon, compare bears, loose parts, socks etc.) *Noah's ark *Snap *From a group of objects can you match the pairs. – take one away. Which pair is missing? *Can you build a tower in matching height.</p>
A1 W5 21/9/20	Compare amounts S1 Ep. 9 Off we go S1 Ep 10. How to Count A Squash and a Squeeze – Julia Donaldson The Enormous Turnip		<p>Identical – *Use five frames – line up identical objects and count-check, more than, less than, fewer than, equal to, the same as. *5 plates with dots on 1-5. Which have more, less *How many in their group? *Get 5 out, can you make a group with fewer in? *Get 2 out can you make a equal amount? *Get 3 out, can you make a group with more in? *Make towers – compare size, count, who has more, fewer than? *Outdoor leaf / acorn hunt. Count who has more, fewer? Write numerals of amounts for them to see. *Dominoes *Share out an amount. What happens if someone else arrives?</p> <p>Non identical - *Gingerbread man / The enormous turnip/ Mr Grumpy's outing – compare number of people at each stage. *Pictures of dots, gingers, objects on 5 frames, numicon – match and compare the amounts. *Make sure use smaller quantities of large items and larger quantities of small items – to distinguish between size and quantity. *Two groups different objects – how many in this group, more, fewer? *Give a number can you find something that is more than, fewer than? *Washing line – picture of amounts – can you put in order</p>

Week	Maths Autumn Term 1 Continued.		
	Themes	Key questions	Activities
A1 W6 28/9/20	<p>Compare size, mass and capacity</p> <p>Dear Zoo – Rod Campbell Where's my teddy - Jez Alborough</p>		<ul style="list-style-type: none"> *Have a mystery box. What could be inside? Small, large, tall, thin. Could they fit inside? What else could not fit in? compare to a contrasting box. *Picnic basket and a small bear and big bear. Which items would be best for which bear? *Outdoor ball hunt. Then sort into big balls and small balls. Which are harder to catch/ throw. *Make own dear zoo boxes. Which animal would fit inside. What shape, size does it need to be? *Use a variety of resources, water, sand, rice, marble, pom poms etc. – explore different containers. How many scoops would it need to be full? *Predict how many cups full to fill a variety of containers. *Building blocks. Long and short blocks. Which would you use? Can they build a long road or short road? A tall or short tower? *Balancing scales to explore. Compare objects. Equal balls of dough? How do you know? *Numicon in feely bag. Can you find one the same size, smaller, bigger than mine?
A1 W7 5/10/20	<p>Exploring pattern</p> <p>S3 Ep8 'Building blocks' S3 Ep17 'Pattern Palace'</p> <p>We're going on a Bear Hunt Elmer Rainbow fish My mum and dad make me laugh – Nick Sharrat</p>		<ul style="list-style-type: none"> *clap, tap, clap tap. Head shoulder, head shoulders. – can you make your own for us to follow. *Meatball – go noodle. *Know which part repeats *Extend/create a 2 step then 3 step repeating pattern *Make simple patterns using colours, shapes, sizes etc. *Explore more complex patterns. – natural flowers, butterflies *Explore symmetrical patterns using colour and shape *Use blocks and numicon to make patterns *Colouring design and build own pattern tower. *Look at different patterns being block colours, pictures, three then gap, all different kinds. *Make a pattern – can you spot the mistake? *Instruments- play and copy musical patterns. *Were going on a bear hunt – word pattern.

Maths Autumn Term 2			
Week	Themes	Key questions	Activities
A2 W1 2/11/20	Representing 1,2,3, Comparing 1,2,3, Composition 1,2,3 S1 Ep1. Meeting One S1 Ep 2. Another One (Meet two) S1 Ep 3. Two S1 Ep 4 Three Meet 3		*Circle (1 side) Triangle (3sides & comers) *What can you find one off? *Each child has one red cube. Find a nother child to make two. *What games do we need two for? *What can you find two off? *Can you match the socks. *Feely bag – with ones and twos in can they make three without looking? *Write numerals 1-3. *Look at making 3 with as many different items *Show 2 and 3 partitioned $2=1+1$ and $3=2+1$ *Look at them on number line one more and one less *Have 3 cups – child hides ball 1 st , 2 nd , 3 rd go. *One finger one thumb keep moving song. *1p *What numcions can you use to make 3. *hear or see drop blocks in pot. How many? Without looking add one more more. How many now? *Doubles *Draw different ways to make 1,2,3,4,5 *Subitise
A2 W2 9/11/20	Hickory, Dickory Dock 123 at the Zoo by Eric Carle I'm Number One by Michael Rosen Representing 1,2,3, Comparing 1,2,3, Composition 1,2,3 S1 Ep 5 One, Two, Three S1 Ep 10 – How to count Triangle and circle – S3 Ep16. Flat land. Goldilocks and The Three Bears The Three Little Pigs The Three Billy Goats Gruff		
A2 W3 16/11/20	Representing numbers to 5 – number 4 S1 Ep 6: Four S1 Ep 8. The Three Little Pigs S1 Ep 13. The Terrible twos S3 Ep 1. Once upon a time. Washing Line – Jez Aldborough Pete the cat and his four groovy buttons – Eric Litwin		*Show numbers 1-5 on fingers. Close eyes and show another way etc. *Write numbers 0-5-- match quantity to numeral *Look at them on number line one more and one less *Partition 4 and 5. $4=5+1$, $5=4+1$. *Sort what is 4 not 4? *5 little ducks song. *Close eyes hear the cubes falling in pot. How many? *5 speckled frogs song. *Numicon and numerals in wrong order – put in order? *Rectangle & square (4 corners & sides), pentagon (5sides) *5 current buns song *Car park inside or out. Park three wheels, 2 wheels, or four wheels. *Set up two farms saying 2 legs or 4 legs. Sort into correct farm. *5 buckets with amounts on. Can you put in the correct amount. *Use a washing line. Put amounts, what's missing. If added where does it go? *Doubles *What number I missing from the multilink towers? *Subitise

A2 W4
23/11/2
0

Representing numbers to 5 – number 5 &
One more and one less

S1 Ep 7: Five

S1 Ep 9: Off we go!

S1 Ep 11. Stampolines

S1 Ep 12. The Whole of me

1 more 1 less - S1 Ep. 14. Holes

S1 Ep. 15. Hide and Seek

Kippers birthday – Mick Inkpen

How many legs- Kes Gray and Jim
Field

- *Re-tell flapjack story. Count a variety of objects wrong can they correct you? Show you how?
- *Have number in bag – they see. Add one how many now? Can add 2 more.
- *Alien doesn't know what 1-5 is – how can we show them?
- *Number hunt round school 0-5 - Number blocks treasure hunt
- *Different cube shapes of same number – dice.
- *Forwards and backwards counting – rocket song
- *Have 4 different items, how many? Make the same. Re arrange. How many now?
- *Get 5 blocks can you connect them? Can you connect them a different way? - model number sentence.
- *5p
- *Make birthday cards to 5.
- *Verbally $1+1=$, $2+1=$ etc. verbally – same as one more
- *In 2s have part-part whole model and split 2,3,4,5 cubes.
- *Make cake e.g. 4 cups of flour, 5 cubes of butter. Share cake out counting out 1 less until get to zero – all gone.
- *One monkey to many book.
- *Have five 1s (blocks) – hold up one sing number blocks song and keep adding one each time. (Teacher builds a block tower stair case) what do you notice? – get taller/bigger
- *Make own staircase like the teachers – partners. Partner 1 close eyes – hide one, which one is missing? – muddle up put back in order.
- *Subitise

Maths Autumn Term 2 Continued

Week

Themes

Key questions

Activities

A2 W5
30/11/20

Positional language

Rosie's walk by Pat Hutchins

Shapes with 4 sides

S3 Ep16. Flat land.

S4 Ep8 'The way of the rectangle'

S5 Ep6 'Square Club'

Bear in a square by Della Blackstone

- *PE – under, over etc.
- *Hide and object, where is it?
- *Listening skills – draw a tree, draw a bird next to the tree etc.
- *Help the bears cross the river – under log, over, between.
- *Rosie's Walk
- *What the ladybird heard
- *Obstacle courses (can use pictorial clues)
- *Follow instructions to place and object, below, under etc.
- *Describe where and object is – use actions for over, under etc.
- *Beebots
- *Build real life journeys or ones out of books.
- *Outside bear hunt. – describe.

- *Introduce names of 2D shapes.
- *Compare 2D shapes, what is the same, what is different?
- *2D shapes in a variety of colours and orientations.
- *What are the sides like?
- *How many corners, sides?
- *Show pictures of real objects been made out of shapes – house etc.
- *Shape hunt.
- *Print with 2D shapes.
- *Can you sort your own way with your own rule?
- *Exploring non regular shapes.
- *Show shapes in different sizes and orientations.
- *can you build your own.
- *How many cubes can you use to build a square face.
- *use matchsticks. Can you build a small or large. How many matchsticks did you use?

A2 W6
7/12/20

Time – Night and day

Peace at Last by Gill Murphy

Day Monkey, Night Monkey by Julia

Funny Bones by Janet & Alan Allberg

The Bad tempered ladybird

The very hungry caterpillar

- *How many sleeps until home day. How many sleeps until...
- *order stories. Order pictures of our day.
- *Month calendar put on birthdays – how many sleeps until next event?
- *Timers – what can you do in that period of time.
- *How many bean bags can you throw in..... How many star jumps can you do in.....How many goals....
- *Obstacle, what happens first, next, time how long to finish.
- *Talk about the seasons.
- *Positional language – now, before, later, soon, after and next. Yesterday, today, tomorrow.

A2 W7
14/12/20

Consolidation

Week	Maths Spring Term 1		
	Themes	Key questions	Activities
Sp1 W1 4/1/21	Introducing zero (1 week) Ep S3 – 5 <i>None the Number by Oliver Jeffers</i> <i>Zero is the Leaves on the Tree by Betsy Franco</i>		*5 little monkeys on the bed – have numerals alongside children *Have two pictures of same thing one with an amount one with 0. *show me 5,4,2,0. do 4,6,3,0 claps. *throw bean bags in bucket – record how many. How do we record 0? *bag of numerals – pull a numeral out (include 0) and they must do something with the numeral, find 2 pebbles, 3 jumps, 5 strides.
Sp1 W2 11/1/21	Representing, comparing, composition 4&5 (1 week) Ep, S1-6, 7, 8, 9, 10, 11. Ep S3- 1, 2, 3,4,5 S5 Ep4 ‘ What’s my number’ <i>A Squash and a Squeeze by Julia Donaldson</i> <i>Room on the Broom by Julia Donaldson</i>	*number bonds to 5	*Number blocks treasure hunt – find the numbers 1-5 *Show numbers 1-5 on fingers. Close eyes and show another way etc. can you show me more/ less. *Write numbers 0-5. *Look at them on number line one more and one less *Partition 4 and 5. $4=5+1$, $5=4+1$. - *how can we make 4? How can we make 5? Show different ways. Part part whole. Can be two parts or even more. *Sort what is 4 not 4? *5 little ducks song. - *5 ducks? Cover an take some away into the ‘pond’ how many are gone, show me how you know? Picture, fingers, cubes. *Close eyes hear the cubes falling in pot. How many? If I have 5 how many are missing? Show me how you know. *5 speckled frogs song. *Numicon and numerals in wrong order – put in order? *Rectangle & square (4 corners & sides), pentagon (5sides) *5p *Re-tell flapjack story. Count a variety of objects wrong can they correct you? Show you how? *Alien doesn’t know what 1-5 is – how can we show them? *Number hunt round school 0-5 *Forwards and backwards counting – rocket song *Have 4 different items, how many? Make the same. Re arrange. How many now? *Get 5 blocks can you connect them? Can you connect them a different way? *Write numbers 0-5 –match numicon to numeral or amount to numeral. Look at dominoes. *Make birthday cards to 5. *Verbally $1+1=$, $2+1=$ etc. verbally – same as one more. *How many different ways can you make 5? – split 5 in different ways model number sentence. *In 2s have part-part whole model and split 2,3,4,5 cubes. *Make own fruit salad, need 5 pieces of fruit but two different kinds. E.g. you used 3 strawberries and 2 grapes to make 5. *put food on plates or snack. Who has more, less. How many? Is it fair? How to make fair. *Show small quantity with large items and large quantity with small items. *towers, who has tallest how many are in yours? *plates with dots 0-5 in different arrangements. Can you find plate with 4? Can you find one with fewer? Can you put in order? *show a numeral. Have picture cards with different amounts of objects, animals etc. on. Can you find me 4? Can you find me a picture card with more than 3? *coloured counters of 5. drop how many yellow? How many red? Can you put on a 5 frame. *bunny ears. How many altogether? How have I made it? *groups of 5 in hoops yes or no. do you like carrots? Sort how many children in each? *2 buckets. I have 5 pebbles how many could be in each?

Week	Maths Spring Term 1		
	Themes	Key questions	Activities
Sp1 W3 18/1/21	<p>6,7,8 (1 week)</p> <p>Ep, S2- 1, 2, 3, 8, 12. S3-14</p> <p>Six Dinner Sid by Inga Moore</p> <p>Kipper's Toybox by Mick Inkpen</p> <p>Sidney the Silly Only Eats Six by M W Penn</p> <p>Anno's Counting Book by Mitsumasa Anno</p> <p>What the Ladybird Heard by Julia Donaldson</p> <p>'One is a snail – ten is a crab' – 'the farmer who couldn't count' – 'one mole digging a hole' – '</p>		<ul style="list-style-type: none"> *Count 0-8 forwards and backwards. *Children get 8 items – can you show 6,7,8 in different ways? What if I add one more, two more? Take one, 3 away? *Ladybirds – add 6/7/8 counters as spots – how many different ways. How do you know its 6 etc.? *Can you make a rainbow using 7 colours? *Mini-beast hunt- find insects- draw them, how many legs? *Simon says- stomp 8 times, clasp 9 times. *8 tower – build as one more take away as 1 less. *Play musical dice – have different towers – roll dice when music stops, if same number sit down. *Words beginning with Oct. *How far can you jump? Jump then measure with blocks – how many blocks? *Roll dice get into groups of... *Counting identical objects – one-to-one counting *Recognising and writing numerals *Recognise a small amount instantly without counting *1 less / 1 more. *can you add 6 legs, 7 dots etc. *loose parts on 10 frames. Large 10 frames outside.

Maths Spring Term 1 Continued.

Week	Maths Spring Term 1 Continued.		
	Themes	Key questions	Activities
Sp1 W4 25/1/21	Making pairs (1 week) Simon's Sock by Sue Hendra Noah's Ark		<ul style="list-style-type: none"> *provide items that come in pairs, socks, 2 giraffes etc. *snap and memory games. *arrange items into pairs, some will be odd one out. *give out items as come in from lunch. Then ask to find child with same item and sit in pairs. *sort wellies into pairs. How do they match? *in pairs mirror each other. *make pairs of numbers, numeral and quantity. *make own Noah's ark.
Sp1 W5 1/2/21	Comparing mass & capacity (1 week) Who Sank the Boat by Pamela Allen The Blue Balloon by Mick Inkpen Balancing Act by Ellen Stoll Walsh Mary Poppins clip –emptying the carpet bag A Beach for Albert by Eleanor May		<ul style="list-style-type: none"> *Goldilocks (porridge) / dear zoo (containers) *Introduction– 5 containers- describe them then introduce language - Full, empty, half full, nearly full, nearly empty *Predict how many cups full to fill a variety of containers. *Two teams – one cup – race to empty one bucket and fill the other.- describe- compare- same cup? What could of happened to make it different? *Use a variety of resources, water, sand, rice, marble, pom poms etc. – explore different containers. *same size cup –cubes - fill with rice – pom poms- sand etc. – then pour into another container – which one is more full? Why? Why might they look different sizes if started the same amount? *label 5 containers full etc. can you do it? *can you fill a container, full, half full, empty etc. can you find a container that would hold more? *different containers. Order by which hold more. How can we check. *Light, heavy, same as, lightest, heaviest, heavier than, lighter than. *Compare two objects by weight *Order more than two objects by their weight. *use pulley system outside – record on blackboard heaviest to lightest. *Group into heavy and light. – predict and test. bring in suitcase or box and exclaim its heavy. What could be inside? *Become human balance scales. Tip to which is lighter heavier. Check on real balancing scales. *give item. Can you find something heavier? Lighter? Using balancing scales to check. *big item that's light. Small item that's heavy.
Sp1 W6 8/2/21	Length & height (1 week) The Giraffe who got a Knot by John Bush Titch by Pat Hutchins Tall by Jez Alborough Jack and the Beanstalk by Traditional Jim and the Beanstalk by Raymond Briggs		<ul style="list-style-type: none"> *Thread beads on pipe cleaners to make caterpillars- compare to each others, who got the longest shortest? *Put children in height order. *Use outdoor blocks to measure apparatus. *Use feet to measure – do we get the same measurement? *Measure hunt round room using hands. *Compare objects in the room – investigate and record. *Record measurements *Compare two objects *Compare three or more objects *Longer/shorter, taller/shorter, tallest, longest, shortest, wider, narrower *Red riding hood / stick man book (collected sticks) *Paper footprint – use it to find item shorter, longer, wider, narrower. Can you put your print in six order with your friends. *measure plants as they grow. *tape measure, rulers, trundle wheels, height charts to explore. *towers, bridges, roll ball, roll car. *ribbon on table stuck, can you cut one shorter, longer? *playdough snakes.

Week	Maths Spring Term 2		
	Themes	Key questions	Activities
Sp2 W1 22/2/21	<p>Combing two groups (1 week)</p> <p>S2 Ep 6 'just add one'</p> <p>S2 Ep 15 'number block castle'</p> <p>S3 Ep 10 'hiccups'</p> <p>S3 Ep13 'five and friends'</p> <p>Quack and Count by Keith Baker</p> <p>The Elephant and the Bad Baby by Elfrida Vipont</p> <p>Don't forget the Bacon by Pat Hutchins</p>		<ul style="list-style-type: none"> *3 little frogs, 3 on the log 4 in the pool how many altogether? *flowers – how many purple? How many blue? How many altogether? *lay dominoes face down. How many spots on each side? How many altogether? *domino template? The domino has 7 spots altogether how many could you put each side? *pictures on IWB – sea etc., how many fish? How many starfish? How many altogether? *two dice games – count each one? Altogether? *coat hanger and pegs, partition and combine. *each have a different numicon, find a partner. How many each how many together? Find another partner repeat. *plates with dots, can you match two plates to make a total of 6,4,3,8 etc. *show what they found on a part part whole model. *problem – jack rolled two dice 4 and 2 and got 6. Racheal rolled a total more than jack. His first dice had 5 what could his second dice have?
Sp2 W2 1/3/21	<p>Time (1 week)</p> <p>The Bad-Tempered Ladybird by Eric Carle</p> <p>Mr Wolf's Week by Colin Hawkins</p> <p>Jasper's Beanstalk by Nick Butterworth</p> <p>5 Minutes Peace by Jill Murphy</p> <p>Days of the Week Song</p>		<ul style="list-style-type: none"> *Yesterday, today, tomorrow *Describe events – now, before, later, soon after, next, later, soon *Seasons *order events. *look at learning journey book. Talk about it, what's been their favourite part so far? *look at pictures of when they were small. Can you guess who is who? How have we changed? *days of the week. *how many of an activity can you do in 1 min, jump, write your name etc. *timers *toast bread, how long did it need? What's happens if in longer, shorter amount of time? *different activities outside, skip, throw bean bags, skittles, bricks for tower, 1 min on each move around. How many could you do in 1 min? *All throw a welly. Who threw the furthest? How can we check? *build a tower of your friends height? How high? Can you draw your friend and the amount of bricks?

Week	Maths Spring Term 2		
	Themes	Key questions	Activities
<p>Sp2 W3 8/3/21</p>	<p>9&10 and Comparing numbers to 10 (1 week)</p> <p>Ep, S2- 4, 5, 10, 11. S3- 9, 10</p> <p>S5 Ep 2 'Now you see us'</p> <p>Ep 3 'Ten's top ten'</p> <p>How do Dinosaurs Count to 10? By Yolen & Teague</p> <p>One Gorilla by Atsuko Morozumi</p> <p>Mouse Count by Ellen Stoll Walsh</p> <p>Nine Naughty Kittens by Linda Jenny</p> <p>Feast for 10 by Cathryn Falwell</p> <p>Cockatoos by Quentin Blake</p> <p>Mr Magnolia by Quentin Blake</p> <p>Ten Black Dots by Donald Crews</p> <p>The Napping House by Audrey Wood & Don Wood</p> <p>Engines Engines by Lisa Bruce & Stephen Waterhouse</p>		<ul style="list-style-type: none"> *3 groups of 3 is nine - grid *Count to 10 forwards and backwards *show me 10 fingers, 9 etc. do we need to count them to check? *10 frame – put 10 on then 9 what do you notice? *buckets 6-10 – can you fill with the correct quantity. *Write numerals 6-10 *compare two sets – row of 6 objects, row of 7 what's different? Then order 3 sets. *Plates with dots on 0-10 – can you put on part part whole model so they total 4 etc. *Roll two dice – how many – did you get less more write – write answer. I scored less than you, I rolled a 3 what could my other dice number be? *Include 0 in number problems. *10p *look at 9 and 10 what do you see. 3 and 3 and 3, 4 and 5. *Hole up numeral, recognise. Can you do that amount of claps, jumps etc. *Help order the numerals 0-10, making deliberate mistakes. Then hide a card. What's missing? *can you show me 9 and 10 with small objects, can you show me in another way? *Draw line outside. Can you do 9 large steps, 9 tiptoes, 9 leaps etc. which one made you travel the furthest? *10 green bottles, skittles. When one falls do you still have 10 in total? *add to a counting book. For each number stick in different ways children have made, drawn etc. of that number. *towers with different shapes bricks. Can you make a tower of 10? *vote for favourite book using cubes to read at end of day. *handful of buttons. Estimate how many. Check on 10 frame. How many can you hold in your hand, compare to friends. *multilink staircase to 10. what do you notice? *sorting compare amounts in each set. *dominoes face down. Turn how many altogether? Who has the most keep the pair. *build name. how many letters are in your name? *Snakes and ladders – how many have you moved all together *Frog party game

Maths Spring Term 2 Continued

Week	Themes	Key questions	Activities
<p>Sp2 W4 15/3/21</p>	<p>Number bonds to 10 (1 week) Ep, S2- 13, 15. S3- 6, 7. Ep, S3-13, 15,</p> <p>Number Bond Rhymes 5 Eggs and 5 Eggs Chuck, Chuck, Chuck Mr Willy-Nilly and Zoey's Dream by Seung-yim Bak Farmer Pete –You Tube</p>		<ul style="list-style-type: none"> *10 green aliens – S2-13 Slides *Number spinner- use blocks to make numbers – part-part whole model represent. *Use real objects in different contexts. *Small world scene pictures – what can you see. How many of... How many all together? *Show their counting in part part whole model and as number sentence. *Coat hanger – 10 pegs, How many different ways can it be changed– write all answers *10 cubes split is as any different ways – write number sentence. *Dice magic? *Introduce symbols + and = / Rearing a number sentence *10 frame – two resources can you fill 10 frame – write sentence. 5+5 = 10 but what else makes 10? *10 numicon – how many different ways can you build a new 10 on top using two numicon. *pull out a numicon from feely bag – represent on 10 frame how many do we need? *Memory game – number cards – turn over 2 cards, so they make 10? *Chalk 10 frame outside – hide 10 of two objects outside they have to find a fill ten frame. *Play skittles- 10 pins. *Part-part whole model using loose parts. *Bead strings – hide some beads – how many am I hiding? *1 bucket- throw 10 bean bags- how many inside- how many outside? Record scores. *10 teddies in the bed. *Buckets 0-10- use loose parts to match quantities. – which two buckets would make 10? What three buckets could make 10? *10 frames partially filled. How many more to fill them? *different objects of 10 and split. 10 fairies on two toad stalls, 10 cars in two carparks, 10 dinosaurs,. *numicon, find your partner that adds to your number to make 10. *10 double sided counters. Drop on plate how many red, how many yellow? *outdoor bus – 10 chairs. How many on bus? How many to full? How many getting off? *hide 10 objects outside. Chalk a large 10 frame. Find them and place. How many do you still need to find?
<p>Sp2 W5 22/3/21</p>	<p>3D shape (1 week)</p> <p>Mouse Shapes by Ellen Stoll Walsh Rapunzel by Traditional The Princess and the Pea by Traditional Changes Changes by Pat Hutchins</p>		<ul style="list-style-type: none"> *Show a collection of 3D shapes, tell your partner as many things as they can about the shape. Is there any shape like it? Is there any shapes different? *Sort the 3D shapes into groups. *Build a tower. Which are best for stacking, which I are best on top, why? Roll etc. *Can you see the 2D shape on the 3D shape- what's the similar / different? *Hold up a 3D shape, what can you see in the classroom with the same shape. – 3D shape hunt. (hoops outside and fill) *Introduce names of the 3D shapes. *Look a famous monuments – can you build? flat shapes are used? Can you build your own? *3D shapes using play dough and straws. *Print with 3D shapes. *Characteristics, faces, edge, vertices, stack, roll. Make ramp, predict will it roll *real life objects, cereal box etc. what shape? *explain your shape to your partner? *I am thinking of shape what is it? *paint print with 3D shapes. *In pairs describe properties of shape.
<p>Sp2 W6 29/3/21</p>	<p>Pattern (1 week) S3 Ep8 'Building blocks' S3 Ep17 'Pattern Palace'</p> <p>Pattern Bugs by Trudy Harris Pattern Fish by Trudy Harris Busy Busy Busy by Haneul Ddang Sally and the Little Fish by Michael</p>		<ul style="list-style-type: none"> *build of AB patterns to ABB, AAB, AAB, AABBB *Draw and build patterns using a variety of objects. *make patterns with body, head, head, clap etc. *show a AB and a similar AAB pattern. What do you notice? *show a pattern with a deliberate mistake, missing item or an extra one? *look at patterns from different traditions. Discuss and create own. *natural object patterns. *press patterns into play dough *loose part patterns *frame with set number of spaces can be different shapes. And provide counters or cubes in different colours. Can you make a pattern that fits, what doesn't fit? How many space do you need for it to fit? *look at wrapping paper with patterns. Can you design your own with printing?

Week	Maths Summer Term 1		
	Themes	Key questions	Activities
Su1 W1 19/4/21	<p>Building numbers beyond 10 / counting patterns beyond 10</p> <p>Ep- S4- 6, 7, 11, 12, 13, 14, 15, S5- 1,2,3,7,8,10,11,12,13,14 S5 Ep6 'The ,many faces of twenty' S5 Ep7 'Ten Vaulting'</p> <p>One Moose, 20 Mice – Stella Blackstone 1 is One – Tasha Tudor The Real Princess – Brenda Williams Jack The Builder – Stuart J Murphy A Dozen Ducklings Lost and Found – Harriet Ziefert 20 Big Trucks in the Middle of the Street – Mark Lee 1 is a Snail, 10 is a Crab – April Sayre & Jeff Sayre</p>		<p>*10 frames, number shapes, towers of cubes and bead strings all support the children to see that larger numbers are composed of full 10s and part of the next 10</p> <p>*Provide opportunities for children to recognise that the numbers 1-9 repeat after every full 10. So they have 1 full ten and 1, 1 full ten and 2, 1 full ten and 3 etc. Then 2 full tens and 1, 2 full tens and 2, 2 full tens and 3 and so on</p> <p>*Show the children 11 using the number shapes or 10 frame. What do the children notice? Can they see which number is represented? Now build 12. What's the same? What's different? Continue the pattern, ask the children to predict what numbers come next and how they could represent each number. What happens when they get to 20 and beyond?</p> <p>*Prepare a set of cards showing pictorial representations and matching numerals (e.g. for 11-25) Give one card to each child. Ask them to find their partner. Can they also arrange the cards in order?</p> <p>*Have two or three ten frame. Fill and roll dice take amount. Last item taken wins. Look at how many got, left.</p> <p>*Two or three ten frames, can you fill them with loose parts.</p> <p>*City scape (numicon outline) What numicon have you used to make the city scape. Can you use others?</p> <p>*Recognising numerals to 20 – writing numerals</p> <p>*Ordering numbers</p> <p>*Counting forwards and backwards</p> <p>*Place value – a teen number is one ten and ____ ones</p> <p>*Making teen numbers with a variety of resources</p> <p>*One more and one less</p> <p>*Make 11, make 12, make 13, make 14, make 15. talk about it being one more than, one less than.</p> <p>*Can you make 20 like step squad? – can you make it another way?</p> <p>*20p</p> <p>*Correct the counting puppet</p> <p>*I count you count. Teacher counts then when point at children they count on.</p> <p>*Count to 20 and back starting at different numbers.</p> <p>*Can you order the number towers to 20. Is any missing?</p> <p>*Peg the numbers (birthday cards) in order of age. Close eyes one has changed? Which one?</p> <p>*Number cards and pictorial representations. Have 4 pictorials each. Hold number up if have they make a pair.</p> <p>*Snakes and ladders</p>
Su1 W2 26/4/21	<p>Building numbers beyond 10 / counting patterns beyond 10</p> <p>Ep- cont.....</p>	Continued.....	<p>Continued.....</p> <p>EXT: Explore 100, fill 10, 10 frames. Have a bucket full of 100, one with more and less. Which has 100? How far can you travel in 100 steps?</p> <p>*Fill buckets. How many inside? Encourage children to put in 10s to count easier.</p>

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<p>Su1 W3 3/5/21</p>	<p>Spatial reasoning, match, rotate, manipulate Spatial reasoning, compose and decompose</p> <p>Snail Trail: A Journey Through Modern Art – Jo Saxton Which One Doesn't Belong – Christopher Danielson</p> <p>Grandpa's Quilt – Betsy Franco Jack and the Flumflum Tree – Julia Donaldson Pezzettino – Neo Lionni</p>	<p>Which shape will you start with? How many triangles will you need? Can you find a shape like this? Does that shape fit? Do you need to turn it round? Tell me about your shape picture. What will your design be? Which shapes will you use? How could we remember your design? Can you make a picture to help you make your design again?</p>	<p>*Puzzles (rotating pieces to fit a space) *Picture boards and tangrams *Match arrangements of shapes, prompting them to use positional language to describe where the shapes are in relation to one another. Ask the children to select shapes to complete picture boards. *Geo boards *Numicons and base boards / underlays *Find the shape which matches the one you hold up. Add challenge by making the shapes more similar and changing the orientations. *Extend to arrangements of linking cubes. Can they find the set which matches yours? Talk about the position of the cubes in relation to one another. *Make a simple shape arrangement. Ask the children to match your arrangement exactly, thinking about which shapes to select and where to place them in relation to the other shapes. This can also be done on a larger scale outside. *Challenge the children to make as many different triangles as they can. How do they know they are all triangles? How many 4-sided shapes can they make? Does the geoboard work for making circles? *Provide outlines of the number shapes in different orientations. Ask the children to select the shape to match each outline. *What pictures (dog, building, house etc.) can you make with numicon and blocks. *Provide simple models or pictures of models. Ask the children to select the shapes they need and position them to replicate the model. Can they design a model for their friend to replicate? *Set up a small world scene or provide pictures of scenes for the children to replicate. Encourage them to talk about where things are in relation to other things. Can they design their own scenes for a friend to replicate? Can they draw a map of their scene? *Which shape doesn't belong? *Can you match to just a shape outline (no detail or colour) *Can you make your own pattern and a template for other to follow of it? *What can you make with triangles, squares etc.? Can you make another larger triangle? *Using squares and rectangles how many different squares and rectangles can you make? How do you know it's a square etc.? *How can you make a bigger square, rectangle, triangle? *Predict what shapes you could make form the triangle and square paper if cut? Explore. *Can you make a star?</p>

Maths Summer Term 1 continued.

Week	Themes	Key questions	Activities
<p>Su1 W4 10/5/21</p>	<p>Adding more / number stories Mouse Count – Ellen Stoll Walsh Mr Gumpy’s Outing – John Burningham Rosie’s Zoo – Ailie Busby One Ted Falls Out of Bed – Julia Donaldson Quack and Count – Keith Baker My Granny Went to Market - Stella Blackstone</p>		<p>*The first, then, now structure can be used to create mathematical stories e.g. First there were 2 people on the bus. Then 2 more people got on the bus. Now there are 4 people on the bus. *Count all together but support to count on. (we know we have 5 on this hand so count on) *Encourage the children to represent the number stories using 10 frames, number tracks and their fingers. *Make links with familiar stories e.g. three bears then 1 girl, now 4. *Encourage the children to create their own first, then, now stories using the small world resources.</p>
<p>Su1 W5 17/5/21</p> <p>Su1 W6 24/5/21</p>	<p>Taking away / number stories S2 Ep 7, 13, 14. S3 Ep 11, 12, 18 S1 Ep 15 ‘hide and seek’</p> <p>Mouse Count – Ellen Stoll Walsh The Shopping Basket – John Burningham Monster Math – Anne Miranda Elevator Magic – Stuart J Murphy</p>		<p>*Use first, then now structure. E.g. First there were 5 people on the bus. Then 2 people got off the bus. Now there are 3 people on the bus. *Encourage the children to count out all of the items at the start, take away the required amount practically, and then subitise or recount to see how many are left. *Race to zero. Players have two ten frames. Fill them. Roll dice and take amount away. Check amount left. *Pick a number card and count out the corresponding number of gold coins. One player covers their eyes whilst the second ‘steals’ some of the coins, hiding them in their hand. The first player then has to work out how many coins have been stolen *Lay out single cubes. Cover and add or take some away. Tell me what’s changed? Added more or taken away? How many now? *Take away / fewer / difference between *symbols – and = and + / recording a number sentence *Word problems – select correct operation and resources. *Problem solving *Jack Hartman counting video. *The difference – 4 to 7 is $7 - 4 = 3$ *Exploring part-part-whole – write number sentence as $8 - 2 = 4$ and $4 + 2 = 8$. *Make 0-10 cube towers and take away – describe what you have done. *10 / 20 green bottles – follow slides – sing song *20 current buns *Find the missing number – 8 split into 3/5 – hide one what have I hidden? How do we know. *block tower, outside leave, stick blocks, take some away. *What else can you take away? *Look at taking 1 away same as 1 less.</p>

Maths Summer Term 2			
Week	Themes	Key questions	Activities
<p>Su2 W1 7/6/20</p>	<p>Doubling S2 Ep 9. S4 Ep 4,</p> <p>Double Trouble - Nrich This is the Story of Alison Hubble - Allan Ahlberg Two of Everything – Lilly Hong Double Dave – Sue Hendra Double the Ducks – Stuart J</p>		<ul style="list-style-type: none"> *Share and half story dice. *Spinderella book – double socks - shoes *Double ladybird spots. *Make ladybird biscuits can you double 3 choc chips. *Talk about doubling is adding the same two numbers together. – 2 lots of., twice as many. *Give children blocks 1-10. Find someone with the same number and double up. Write the number you have made. *two hoops outside have to double what you put in one. *mirror – put amount in front in reflect its been doubled. Can you count them all? *numicon – Double printing – write number. *paint dots one side – fold – what's the answer? *Double yourself 'partner' double again 'group of 4' double again 'group of 8' etc. *Use multilink to visually show doubling. *Make doubles using a range of objects. Can put on ten frame *Play dominoes identifying the doubles made. *The children sit opposite each other in pairs with a barrier between them and a collection of small items such as pebbles or cubes. One child sets out a quantity. They show their partner quickly and then hide again. Their partner matches the quantity. Then the barrier is removed. Check - Is it a double? Which double have we made? *Play Doubles The children take turns to roll 2 dice. They score a point each time they roll a double. The first to reach 3 points wins the game. *Use tweezers to add poms poms on each butterfly wing or ladybird etc. *Doubling café – cupcakes double to topping, cookies, double the chips.
<p>Su2 W2 14/6/21</p>	<p>Sharing & Grouping</p> <p>The Doorbell Rang - Pat Hutchins The Gingerbread Man – Traditional Bean Thirteen - Matthew McElligott One Hungry Cat – Joanne Rocklin Ness the Nurse – Nick Sharratt</p>		<ul style="list-style-type: none"> *Sharing is having the same amount 'fair' **Can you feed the two animals? *Can we share out the fruit? Banana, apple etc. *What can we share / half? What cant we share half? *Can you half the piece of paper / plate etc.? *Half / share numbers and objects. *Can you share 5 and 7? Etc.? 'some left over' discuss what can be done with them. *Share into two equal groups e.g. half the strawberries for me and half for my friend. *Share them wrong (more in one group) Prompt children to help share them fairly. What if someone else arrives? *Provide opportunities for children to group objects in different contexts. Can they give each gingerbread man 3 buttons? Can they give each child 5 carrot sticks during snack. Can they arrange their pebbles into groups of 2? What about groups of 3? *Teddy bears picnic

Maths Summer Term 2 continued.			
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Su2 W3 21/6/21	Even and Odd S2 Ep 11 S4 Ep 5, 9 S5 Ep8 'Twoland' Ep10 ' Odd sidestory' One Odd Day – Doris Fisher Pete the Cat and the Missing Cupcakes – James Dean Underwater Counting – Jerry Pallotta		<p>*The children begin to understand that some quantities will share equally into 2 groups and some won't. They may also notice that some quantities can be grouped into pairs and some will have one left over</p> <p>*Encourage the children to notice the odd and even structure on the number shapes and by building pair-wise patterns on the 10 frames. *Ask 5 children to come to the front. Can we group the children into pairs? Does everyone have a partner? Why not? What could we do to solve this problem?</p> <p>*Encourage the children to investigate whether small quantities are odd or even by sharing into 2 groups and by making pairs (6 in equal groups = 2 lots of 3. 6 into pairs = 3 groups of 2)</p> <p>*Odds and evens, which can be shared?</p> <p>*Can you make odd numbers / even numbers – what do you notice?</p> <p>*Can you share the even numbers between two? Can you share the odd numbers?</p> <p>*Ask the children to build pair-wise patterns on the 10 frames and sort them into those which have two equal groups (even numbers) and those which have two unequal groups (odd numbers).</p> <p>*Provide pots of items containing quantities from 1 to 10 Ask the children to count the items in each pot and decide if there is an odd or an even quantity. How could they check?</p> <p>*Place the number shapes into a bag. Ask the children to feel inside the bag and find an odd number. How did they know it was odd? Can they find an even number? Can they sort the number shapes into odd and even? Can we line them up to see the odd, even, odd, even pattern as we count?</p> <p>*create their own odd and even pictures. Look at the pictures together. Is this an odd or an even picture? E.g. a monster with odd eyes and even legs. A house with even windows and odd flowers.</p> <p>*EXT – Explore if the odd and evens can be halved?</p>
Su2 W4 28/6/21	Deepening Understanding Mr Gumpy's Outing – John Burningham Billy's Bucket – Kes Gray Harry and his Bucketful of Dinosaurs – Ian Whybrow Who Sank the Boat – Pamela Allen Mr Archimede's Bath – Pamela Allen Patterns and Relationships Ants Rule The Long and Short of it – Bob Barner Pattern Fish – Trudy Harris Pattern Bugs - Trudy Harris The Leopard's Drum – Jessica Souhami Jamil's Clever Cat – Fiona French		<p>*extended problem solving and develop their critical thinking skills.</p> <p>*Familiar stories provide a great starting point for problem solving. Mr Gumpy's Outing is one example. Show the children a page from the story and explain that Mr Gumpy has a problem. There are too many legs in his boat. Everyone's legs are getting tangled up. Ask the children to work out how many legs there are. Could they draw a picture to help them work it out?</p> <p>*What if there are 3 characters inside the boat? How many legs could there be? What if there are 14 legs in the boat? How many characters could there be? Ask the children to explore the different possibilities.</p> <p>*Challenge the children to solve problems on a large scale: The playground is a crocodile infested swamp! How could we rescue teddy without putting our feet on the ground? Can you build a shelter to keep everyone dry? How could we fill the bucket with water when all of our containers have holes? Which team can fill their bucket first?</p> <p>*Children should be given opportunities to explore and investigate relationships between numbers and shapes</p> <p>*Ask the children to explore the different relationships they can find between the unit construction blocks. For example, how many short blocks do they need to match 4 long blocks?</p> <p>*Show the children a set of Cuisenaire rods. How many green blocks measure the same as one blue block? What other relationships can they find? Can they find a block which is double the length of another block? How could they check?</p> <p>*Model a pattern, what would go next?</p> <p>*Build a repeating ABBC pattern. Ask the children to describe and continue the pattern. Can they identify the unit of repeat? Challenge them to create a different pattern using the same ABBC structure. Can they represent their pattern using drawings or symbols? Can they make their pattern continue around a circle?</p>

Maths Summer Term 2 continued.		
Wee k	Themes	Activities
Su2 W5 5/7/21	<p>Spatial Reasoning Visualise and Build & Mapping</p> <p>Rosie's Walk – Pat Hutchins What the Ladybird Heard - Julia Donaldson We're Going on a Bear Hunt – Michael Rosen Mr Gumpy's Motor Car – John Burningham Cockatoos – Quentin Blake</p> <p>The Secret Path – Nick Butterworth Me on the Map – Joan Sweeney Little Red Riding Hood – Traditional If I Built a House – Chris Van Dusen In Every House on Every Street – Jess Hitchman Once Upon a Time Map Book – B.G. Hennessy</p>	<p>*Provide opportunities for children to replicate simple constructions, models, real places and places in stories. Prompt them to use positional language to describe where objects are in relation to other items. The use of gesture to accompany the positional language can also support understanding.</p> <p>*provide verbal instructions for them to follow as they build.</p> <p>*Set up a small world scene and ask the children to describe where things are in relation to other things. Then ask them to move around and look at it from a different view point. Does it look the same? What do they notice?</p> <p>*During class visits, walks around the local area, or when playing outdoors, encourage the children to notice and describe where things are in relation to others. Encourage the children to recreate the places they have visited.</p> <p>*Provide verbal instructions as you arrange your items. Prompt the children to arrange their set in exactly the same way. Compare the finished arrangements to see if they look the same. Repeat with different children taking on the role of leader. Can then Add a barrier, do models then remove barrier and compare.</p> <p>*Take photographs of the outdoor area from unusual viewpoints. For example, under the tree or from very high up or low down. Challenge the children to identify where the photographer was standing.</p> <p>*Show the children a simple arrangement made from interlocking cubes. Ask them to talk about what they notice. Can they recreate the same arrangement? How many cubes will they need? Are any of the cubes hidden? Can you design a different arrangement for us to build using these cubes? Do same colour models make this task easier or harder?</p> <p>*The children understand that we can make maps and plans to represent places and use these to see where things are in relation to other things. Provide a range of maps and plans for the children to look at and discuss. What can they see on the map? Where would we put the carpet area on a map of our classroom? Provide opportunities for them to create their own maps to represent the models they build, familiar places and places in stories.</p> <p>*Ask the children what they pass on the way to school. Can they draw a simple linear map to show their home, their street, the school and some of the landmarks they pass on the way? What do they pass first, next etc.</p> <p>*Provide a large piece of paper in the shape of the classroom with the doors and windows already marked on. Explain that you are going make a map of the classroom. Have some simple pictures to represent the classroom items. Ask the children to discuss where to place them on the map.</p> <p>*Provide a simple map of an obstacle course. Encourage the children to use the map to build the obstacle course.</p> <p>*Encourage the children to design their own new room and to draw a plan like Jack in If I Built a House.</p>
Su2 W6 12/7/21	Consolidation	<p>Close any gaps</p> <p>Digging deeper into all areas – lots of problem solving</p>
Su2 W7 19/7/21	Consolidation	