#### Autumn term 1

1	2	3	4	5	6	7
Getting to know you		Just like Me				
		Match	Sort	Compare amounts	Compare size, mass, capacity	Simple patterns
Opportunities introducing th provision and know the child	getting to	Provide opportunities for the children to explore and match objects which are the same. Can you find one exactly like mine? How do you know it's the same? Can you find one different to mine? Why is this one not like mine?	Children learn that collections can be sorted into sets based on attributes such as colour, size or shape. Sorting enables the children to consider what is the same about all the objects in one set and how they are different to the other sets.  They begin to understand that the same collection of objects can be sorted in different ways	Once children can confidently sort collections into sets they learn that these sets can be compared and ordered. They understand that when making comparisons a set can have more, the same or fewer than another set. NOTE – it is easier for children to notice the difference between sets when the difference is greater. Start by asking the children to compare 2 and 5	Children learn that objects can be compared and ordered according to their size. Encourage the use of language such as big and little, small and large to describe a range of objects. More specific language such as tall, long, short can also be introduced.	Children copy, continue and create their own patterns. It is important to provide patterns with at least three full units of repeat. Encourage the children to say the pattern out loud
		Noah's Ark Monkey Puzzle by JD Snap games and cards	The Button Box M Reid Frog and Toad – A Lost Button Arnold Lobel	rather than 5 and 6 A squash and a squeeze – JD Seaweed soup – Stuart J Murphy The enormous turnip	Where's my Teddy? – Jez Alborough It's the Bear – Jez Alborough Dear Zoo – Rod Cambell	In and out the dusty bluebells Tongue twisters - Red lorry, yellow lorry

<b>Ellel Reception Maths Yea</b>	r Overview
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	A new house for	
	mouse – Petr Horacek	
	Mr Big – Ed Vere	
	My cat likes to hide in	
	boxes – Eve Sutton	

#### Autumn term 2

1	2	3			
	It's me 1, 2, 3!				
Representing 1,2,3	Comparing 1,2,3 Circles and triangles	Composition of 1,2,3 Spatial awareness			
Children identify, representations of 1,2,3. They subitise or count to find out how many and make their own collections of 1,2 and 3 objects. They match the number names we say to numerals and quantities. They count up to 3 objects in different arrangements by touching each object as they count and recognise that the final number they say names the set. They use their own mark making to represent 1,2 and 3	Children begin to understand that as we count, each number is one more. Similarly, as we count back, each number is one less than the previous number.  Circles and triangles Children learn that circles have 1 curved side and that triangles have 3 straight sides. They begin to recognise these shapes on everyday items in the classroom and outside. Encourage the children to build their own circles and triangles. It is important to show circles and triangles in a variety of different shapes and sizes and orientations and sides of different lengths	Introduce the children to the idea that all numbers are made up of smaller numbers.  Allow them to explore and notice the different compositions of 2 and 3, for example 3 can be composed of 1 and 1 and 1 or 2 and 1 or 1 and 2.  Spatial awareness  Children hear and begin to use positional language to describe how items are positioned in relation to other items.  They build life-sized journeys outdoors and travel through them, exploring them from different perspectives.  They begin to represent real places they have visited or places in stories with their models, drawings or maps.			
S1 Episodes 1 (One)	S1 Episodes 2 (Another One) S1 Episodes 3 (Two)	S1 Episodes 4 (Three)			
Circle 1 on the clock 1p	2 on the clock 2 step repeating patterns 2p	Triangles 3 on the clock , Making 3p 3 step repeating patterns			
Hickory Dickory Dock  123 at the zoo – Eric Carle I'm number one – Michael Rosen One Bear at bedtime – Mick Inkpen	The three bears The three little pigs The little bear and the wish fish – Debi Gliori When Goldilocks went to the house of the bears – song Pink Tiara cookies for three – Maria Dismondy	The Three Billy Boats Gruff Number Farm – Stephen Holmes			

#### Autumn term 2

4	5	6	7		
	Light and Dark				
Four Shapes with 4 sides	Five	One more and one less	Night and day		
Children count on and back to 4. They count and subitise sets of up to 4 objects to find out how many and make their own collections. They match the number names to numerals and quantities and are able to say which sets have more and which have fewer items. When counting they continue to learn that the final number they the names the set. They use their own mark making to represent numbers to 4.  Shapes with 4 sides Children learn that squares and rectangles have 4 straight sides and 4 corners. They begin to recognise these shapes on everyday items in the classroom and outside. Encourage the children to build their own squares and rectangles. It is important to show squares and rectangles in a variety of different shapes and sizes and orientations	Children continue to subitise up to 5 items and to count forwards and backwards using the counting principles.  They represent up to 5 objects on a 5 frame and understand that if the frame is full then there are 5.	Children continue to count, subitise and compare as they explore 1 more and 1 less.  Encourage children to use a five frame to represent numbers and to predict how many there will be if they add 1 more or take 1 away.  Prompt children to see the link between counting forwards and the one more pattern and counting backwards and the one less pattern.	Children talk about night and day and order key events in their daily routines.  They use language to describe when events happen e.g. day, night, morning, afternoon, before, after, today, tomorrow.  Children begin to measure time in simple ways e.g. counting the number of sleeps until an important event or using timers to measure durations of events.		
S1 Episode 6 (Four)	S1 Episodes 7 (Five)	S1 Episode 10 (How to Count)			

S1 Episode 8 (Three Little Pigs)	S1 Episodes 9 (Off We Go!)	S1 Episode 15 (Hide & Seek)	
	S1 Episodes 11 (Stampolines)		
Quadrilaterals	Pentagons		
4 on the clock	5 on the clock		
	5p		
Pete the cat and his 4 groovy buttons	Kipper's birthday – Mick Inkpen	The gingerbread man	Fox in the dark – Alison Green
– Eric Litwin	5 little friends – Sarah Dyer	The enormous turnip	Peace at last – Jill Murphy
Witches four 0 Mark Brown	5 little men in a flying saucer	The Very Hungry Caterpillar	Kipper's monster – Mick Inkpen
Washing line – Jez Alborough	5 small stars – Ladybird	Stella to Earth – Simon Puttock	Day monkey, nught monkey – Julia
Anno's counting book – Mitsumasa	5 currant buns	5 speckled frogs	Donaldson
Anno	5 little monkeys	5 currant buns	The dark, dark tale – Ruth Brown
Shapes with 4 sides		5 little ducks	Funnybones – Janet & Allen Allberg
Square – Mac Barnett and Jon			Days of the week song
Klassen			
Mr Strong – Roger Hargreaves			
Bear in a square – Della Blackstone			

#### Spring term 1

1	2	3			
	Alive in 5				
Introducing zero	Comparing numbers to 5	Composition of 4 & 5			
The children will already have some practical understanding of 'nothing there' or 'all gone'. Here, they learn that the number name zero and the numeral 0 can be used to represent this idea. The children should be given opportunities to apply this understanding within the classroom. E.g. There are 0 children playing in the sand. Number songs which count back help to develop the understanding that 0 is one less than one	Children continue to understand that when comparing numbers, one quantity can be more than, the same as or fewer than another quantity Use a range of representations to support this understanding and encourage the children to compare quantities using a variety of objects and representations. Support the children to make comparisons in different contexts as they play.  Compare mass  Children may already have some experience of weight through carrying heavy and light items.  Encourage them to make direct comparisons holding items to estimate which feels the heaviest then use scales to check. Prompt them to use the language of heavy, heavier then, heaviest, light, lighter than, lightest to compare items starting with items which have an obvious difference in weight. Avoid the common misconception that bigger items are always heavier by providing some small heavier items and some large lighter ones.	Children will continue to develop the understanding that all numbers are made up of smaller numbers. Allow them to explore and notice the different compositions of 4 and 5. For example 5 can be composed of 1 and 1 and 3 or 2 and 3 or 1 and 4.  Compare capacity  Encourage children to build on their understanding of full and empty to show half full, nearly full and nearly empty. Provide opportunities to explore capacity using different materials such as sand, water, rice and beads.  Provide different shaped containers to investigate. Prompt them to use the language of tall, thin, narrow, wide and shallow.  Encourage the children to make direct comparisons by pouring from one container into another. They can also use small post or ladles to make indirect comparisons by counting how many pots it takes to fill each container			

S1 Episode	S1 Episode 6 (Number 4)	S1 Episode 12 the whole of me (part part whole)
	S1 Episode 8 three little pigs (counting to 4)	S1 Episode 15 Hide and seek (number bonds to 5)
	S1 Episode 7 (number 5)	S3 Episode 3 numberblocks express (addition and
		subtraction bonds to 5)
Nothing	Pentagon	
All gone	5 on the clock	
None left	5p	
Numberblocks None the Number - Oliver Jeffers	A Squash and a Squeeze –Julia Donaldson	Number Blocks -The Whole of Me
Zero is the Leaves on the Tree – Betsy Franco Alice	Room on the Broom –Julia Donaldson	The Ugly Five –Julia Donaldson
the Camel 10 in the Bed	One Elephant Came Out to Play	I Spy Numbers –Jean Marzello
Zero or Not Zero sorting Activity Twinkl	5 Little Monkeys Swinging in a Tree	5 Friends Counting –Oxford Owls
	Who Sank the Boat –Pamela Allen	There's a Hole in my Bucket!
	The Blue Balloon –Mick Inkpen	Mary Poppins clip –emptying the carpet bag
	Balancing Act –Ellen Stoll Walsh	A Beach for Albert –Eleanor May

#### Spring term 1

4	5	6			
	Growing 6,7,8				
6,7 &8	Making pairs	Combining 2 groups			
Children continue to apply the accounting principles and counting to 6, 7 and 8 they represent 6, 7 and 8 in different ways and can count out the required number of objects from a larger group arranging 6, 7 or 8 items into smaller groups or support the children to conceptually subitise and see how the numbers are made up of smaller numbers  E.g. I know it is eight because I see four and four encourage the children to order and compare their representations noticing one more less patterns as they count on and back to 8	Children build on their earlier work and matching to find and make pairs they begin to understand that a pair is to provide collections of items which come in pairs encourage the children to arrange a small quantity into pairs and noticed that some quantities will have an odd one leftover was no partner teach the children to play games which involve matching pairs for example snap on memory games  Length and height  Children begin by using language to describe length and height e.g. the tree still definitely short making direct comparisons they may initially say something is bigger than something else increase in which is more specific mathematical vocabulary relating to length longer shorter height taller shorter and breath my dinner I will encourage the children to making direct comparisons using objects such as block so cubes to measure items e.g. this Andres for blacks long the table is five blocks along the sand tray shorter than the table	Children begin to combine 2 groups to find how many altogether.  They should be given opportunities to do this in many contexts using real objects. E.g. There are 3 frogs on the log and 4 in the pool. How many frogs altogether?  Encourage the children to subitise where possible although they may need to count in ones to find how many altogether.  The interactive whiteboard files can also be used to create pictorial scenes for the children to discuss.  Time  Children continue to order and sequence important times in the day and use language is such is now before later soon after and then and next to describe when events happen they begin to recognise that regular events happened on the same day each week and use the vocabulary yesterday today and tomorrow to describe on events happen children are able to describe significant events in their lives and talk about events they are looking forward to the left to their own experiences in the stories they read that some processes such as growing vegetables take a longer time			

S2 Episode 1 six	S1 Episode 12 terrible two's	S1 Episode 14 holes (addition and subtraction)
S2 Episode 2 seven	S2 Episode 9 double trouble (doubling and	S2 Episode 12 fluffles (addition)
S2 Episode 3 eight	halving)	S2 Episode 14 Numberblock castle (+ and - 1-4)
		S3 Episode 3 numberblocks express (+ and - to 5)
6, 7, 8 on the clock		
Six Dinner Sid – Inga Moore Kipper's Toybox –	Simon's Sock – Sue Hendra 10 Fat Sausages	online.com/memory/
Mick Inkpen Sidney the Silly Only Eats Six – M W	1 2 Buckle my Shoe	WRM Interactive whiteboards
Penn Anno's Counting Book – Mitsumasa Anno	Noah's Ark	Dice and board games
What the Ladybird Heard – Julia Donaldson	Pairs! In the Garden – Smriti Prasadam-Halls	Quack and Count by Keith Baker
Aaaarrgghh, Spider – Lydia Monks	The Giraffe who got a Knot – John Bush Titch –	The Elephant and the Bad Baby – Elfrida Vipont
	Pat Hutchins Tall – Jez Alborough Jack and the	Don't forget the Bacon – Pat Hutchins
	Beanstalk	Jim and the Beanstalk – Raymond Brigg
		The Bad-Tempered Ladybird – Eric Carle
		Mr Wolf's Week – Colin Hawkins
		Jasper's Beanstalk - Nick Butterworth
		5 Minutes Peace – Jill Murphy
		Days of the Week Song

#### Spring term 2

1	2	3			
	Building 9,10				
9 & 10	Comparing numbers to 10	Bonds to 10			
Children continue to reply accounting principles and counting to 9 and 10 forwards and backwards they represent nine and 10 in different ways arranging nine or 10 items into small groups will support the children to conceptually subitise these large numbers and explore their composition e.g. I know it's nine because I see three and three and three children noticed a 10 frames film and there is 10 I can use 10 frames fingers and bits of string to subtypes groups and nine and 10	Children continue to make comparisons by lining items up with one-to-one correspondence to compare them directly or by counting each set carefully and comparing their position in accounting order as children sense of number develops so does analogy of where each number six in relation to the other numbers they understand that when making comparisons a second I'm more items for your items are the same number of items is another set they begin by comparing to quantities and progress to ordering three or more quantities  3d shape  Children will naturally exploring manipulate 3-D shapes through their black plate and modelling prompt them to consider which shape stack and which shapes role and why that is. They should be given opportunities to build using a variety of shapes and construct and 3-D shapes in different ways children can be introduced to the names of the shapes and be given the opportunities to explore similarities and differences between them as they play and to sort them according to what they notice	The children explore number bonds to 10 using real objects in different concept contexts e.g. there are 10 apples how many in the tree and how many on the ground 10 frames or egg boxes with 10 holes can be partially filled with objects and the children asked how many more do we need to make a full 10 other manipulatives such as fingers beads and strings and number shapes I will see useful for exploring bonds to 10 Pattern  Build on the children's earlier AB pattern work by introducing more complex patterns the children explore patterns which use the terms items more than once in each repeat for example ABBAAB Again it is important that each pattern new model has at least 34 units of repeat the more units of repeat the easier it is to identify and continue the pattern encourage the children to sage pattern aloud and create patterns around the edges of shapes as well as in straight lines			

S2 Episode 4 nine	S2 Episode 6 just add 1	S3 Episode 3 numberblocks express (+ and -bonds
S2 Episode 5 ten	S2 Episode 7 blast off (bonds to 10	to 5)
		S3 Episode 10 hiccups (+ and - bonds 6-10)
		S3 Episode 15 ten again (+ and - bonds to 10)
10p		
9 and 10 on the clock		
How do Dinosaurs Count to 10? - Yolen & Teague	Cockatoos – Quentin Blake Mr Magnolia –	Number Bond Rhymes
One Gorilla – Atsuko Morozumi	Quentin Blake	5 Eggs and 5 Eggs Chuck, Chuck, Chuck
Mouse Count - Ellen Stoll Walsh	Ten Black Dots – Donald Crews	Mr Willy-Nilly and Zoey's Dream – Seung-yim Bak
Nine Naughty Kittens – Linda Jenny	The Napping House – Audrey Wood & Don Wood	Farmer Pete – You Tube
Feast for 10 - Cathryn Falwell	Engines Engines – Lisa Bruce & Stephen	
	Waterhouse	
	Don't forget the Bacon – Pat Hutchins	

1			2	3		
To 20 and Beyond						
Building numbers beyond 10		Counting patterns beyond 10		Spatial reasoning - Match, rotate, manipulate		
Encourage the children to build and identify numbers to 20 (and beyond) using a range of resources. 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 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		Provide regular opportunities for children to count on and back beyond 10 representations in numerals can support children to count on and back and noticed the repeating 1 to 9 patterns provide representations which clearly show the full tens and part of 10 for example 14 is wonderful 10 and four encourage the children to count on or back from different starting points to say what comes before or after a given number and to play sequences are numbers in order you can also change and find larger numbers and number tracks and 100 squares		Provide regular opportunities for the children to complete jigsaws and shape puzzles They need opportunities to select and rotate shapes to fella given space inclusion to explain why they chose a particular shape of my different shape wouldn't fit provide opportunities for the children to match arrangements of shapes prompting to use positional language to describe where the shapes are in relation to one another ask the children select shapes to complete picture boards or tangram outlines		
S4 Episode 6 eleven S4 Episode 7 twelve	S4 Episode 11 thirteen S4 Episode 12 fourteen	S5 Episode 5 sixteen S5 Episode 7 seventeen S5 Episode 8 eighteen	S5 Episode 10 nineteen S5 Episode 11 twenty			
S4 Episode 13 fifteen  11 and 12 on the clock 24 hour clock Toes, Fingers 10p 20p		33 Episode o eignteen	<u> </u>			
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 Peg + Cat The Teens		A Journey Through Modern Art - Jo Saxton Which One Doesn't Belong - Christopher Danielson Jigsaws and shape puzzles & Tangrams Pattern blocks, Cuisenaire rods, Geo boards Numicon and base board overlays		

4	5	6			
First, Then, Now					
Adding more	Taking away	Spatial reasoning - Compose and decompose			
The children will use real objects to see that the quantity of a group can be changed by adding more, The first, then, now structure can be used to create mathematical stones in meaningful contexts.  At first, the children may need to re-count all of the items to see how many they have altogether, Eg1, 2, 3, 4. 5, 6,7  When they are ready, support them to count on E.g, 4, 5, 6,7  Encourage the children to represent the number stories using 10 frames, number tracks and their fingers.	The children use real objects to see that the quantity of a group can be changed by taking items away.  The first, then, now structure can again be used to create mathematical stories in meaningful contexts.  Encourage the children to count out all of the items at the start take away the required about practically and then subitise or recount see how many are left.  Continue to encourage the children to represent them on the stories using 10 frames, number tracks and their fingers.	Children understand that shapes can be combined and separated to make new shapes, Provide opportunities for the children to fit shapes together and break shapes apart and to notice the new shapes they have created. Investigate how many different ways a given shape can be built using smaller shapes. Encourage the children to explore the different shapes they can make by combining a set of given shapes in different ways.			
S2 Episode 12 Fluffies S2 Episode 13 the Two Tree S3 Episode 3 The Numberblocks Express	S3 Episode 11 What's the Difference S3 Episode 12 Numberblocks Rally				
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	Other Resources Incey Wincey Spider game - Nrich Tad - Benji Davis Mouse Count - Ellen Stoll Walsh The Shopping Basket John Burning/ham Monster Math - Anne Miranda Elevator Magic - Stuart J Murphy	Grandpa's Quilt - Betsy Franco Jack and the Flumflum Tree - Julia Donaldson Pezzettino - Neo Lionni Shape puzzles & Tangrams Pattern blocks & Cuisenaire rods			

1	2	3				
Find my Pattern						
Doubling	Sharing and Grouping	Spatial Reasoning – Visualise and Build				
The children will learn that double means twice as many. They should be given opportunities to build doubles using real objects and mathematical equipment. Building numbers using the pair- wise patterns on 10 frames helps the children to see the doubles. Mirrors and barrier games are a fun way for children to see doubles as they build and to explore early symmetry, Encourage children to say the doubles as they build them, e.g. Double 2 is 4 Provide examples of doubles and non-doubles for the children to sort and explain why	The children will probably already have some experience of sharing and will be quick to point out when items are not shared fairly, During snack time or group activities, encourage them to check that the items are shared equally and that everyone has the same. The children should also be given opportunities to recognise and make equal groups. For example, can you put 3 crackers on each plate or plant 2 flowers into each pot? What groups do they notice on a bead string? The children will notice that sometimes there are items left over when they share or group. Encourage them to come up with their own suggestions for how to resolve this. Odd and Even 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. Provide opportunities for them to explore these ideas in different contexts as they play and to talk about what they notice. Encourage the children to notice the odd and even structure on the number shapes and by building pairwise patterns on the 10 frames.	Children understand that places and models can be replicated and need to experience looking at these from different positions. 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.  Encourage children to visualise simple models by playing barrier games and providing verbal instructions for them to follow as they build.				

S2 Episode 9 double trouble (doubling and	S6 Episode 3 Lair of Shares	
halving)	S2 Episode 11 odd and even	
Specials double back – (doubling numbers )		
Double Trouble - Nrich	The Doorbell Rang - Pat Hutchins	Rosie's Walk - Pat Hutchins
This is the Story of Alison Hubble - Allan	Nrich- Maths Story Time	What the Ladybird Heard - Julia Donaldson
Ahlberg	The Gingerbread Man - Traditional	We're Going on a Bear Hunt - Michael Rosen
Two of Everything - Lilly Hong	Bean Thirteen - Matthew McElligott	Mr Gumpy's Motor Car - John Burningham
Double Dave - Sue Hendra	One Hungry Cat - Joanne Rocklin	Cockatoos - Quentin Blake
Double the Ducks - Stuart J Murphy	Ness the Nurse - Nick Sharratt	
	One Odd Dav - Doris Fisher	
	Pete the Cat and the Missing Cupcakes - James Dean	
	Underwater Counting - Jerry Pallotta	
	10 Fat Sausages song	

4	5	6			
On the Move					
Deepening Understanding	Patterns & Relationships	Spatial Reasoning – Mapping			
Children need time and opportunities to engage in extended problem solving and develop their critical thinking skills.  These problems can be linked to familiar stories or come from the children's suggestions or real problems that arise as they play.  Encourage the children to discuss different possible starting points.  Children might need support to carry out their plans and to make adaptations as they go along. Afterwards, encourage the children to review and discuss their strategies. Which were the most successful, which didn't work and why?	Children should be given opportunities to explore and investigate relationships between numbers and shapes. Classroom resources based around a standard unit such as Cuisenaire rods, pattern blocks and the unit construction blocks are particularly good for exploring these relationships. Children should also continue to copy, continue and create a widening range of repeating patterns and symmetrical constructions. Draw children's attention to patterns in stories from a range of cultures.	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.			
S 6 Episode 7 We're Going on a Square Hunt					
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	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	The Secret Path - Nick Butterworth Me on the Map - Joan Sweeney Little Red Riding Hood - Traditional If1 Built a House - Chris Van Dusen In Every House on Every Street - Jess Hitchman Once Upon a Time Map Book - B.G. Henness			