

Nursery Mathematics

Overview

Daily Skills

Maths should not only be taught during specific maths sessions but wherever possible throughout the day. The following should be utilised to support maths teaching:

- Days of the week song and talking about the day
- General counting e.g. counting how many bananas there are in the fruit box.
- Counting songs
- Use of ordinal numbers e.g. "Sam line up first, Lilly line up second..."
- Maths games such as track counting games
- Noticing maths in the environment e.g. asking children what they notice about a tree. They may say it is tall, has circles on etc.
- Incorporating maths in areas of continuous provision wherever possible e.g. an activity that matches numeral to quantity in the finger gym area.
- Incorporating maths in daily routines e.g. during registration time. If there are 3 children absent the children clap 3 times. Having labels on pencil pots with a representation of a number to show how many pencils go in that pot during tidy up time. Different representations of number on the 'how many children can play here' posters.

Key language

Cardinal	The number that identifies how many there are in a set
Numeral	The written symbol for a number e.g. 1, 2, 3
Subitise	Instantly recognise a small quantity without having to count how many there are.
More and fewer; more than and fewer than	Used when talking about an amount of objects
More and less; more than and less than	Used when talking about the number e.g. 2 is less than 4.

Key representations

Five Frames	
Numicon	
Fingers	
Dice	
Cubes	
Numerals	
Real life objects	
Number Blocks	
Drawing	

Autumn Overview

Geometry	Recognising, naming and matching colours
	Sorting by various attributes
	Continuing AB patterns

Measurement	Using the language of size
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Number & Place Value	Grasping the Counting Principles
	Comparing amounts of objects

Guidance

Autumn 1

Colours (2 weeks)	Recognising, naming and matching colours
Sorting (2 weeks)	Sorting by various attributes
Pattern (2 weeks)	Continuing AB patterns

Recognising and naming colours

Children should be taught to recognise and name colours in a variety of contexts e.g. toys within the classroom, colours in nature, colours in the environment, matching colours, colours on themselves such as hair, skin, clothes. Children should be able to say when objects are and are not the same colour. Link to expressive art and design through painting.

Other resources

The Usborne Big Book of Colours

Monsters Love Colors – Mike Austin

Key Vocabulary: notice, match, same, colour

Sorting

There should be a focus on reasoning within sorting i.e how have you sorted the animals/button etc? Children should be given the opportunity to sort the objects by their own rules and should be taught how to communicate that rule (e.g. I have sorted the buttons by colour). This should be explored in many different contexts such as shapes, different coloured and size objects, different

animals, objects found in the environment, appearance of various objects and people. Children should be taught to verbalise what is the same and what is different between sets of objects (e.g these buttons are pink and these buttons are blue/ they are boys and they are girls). Links can be made to Understanding of the World

Other resources

Sort it Out! – Barbara Mariconda

Sorting at the market – Tracey Steffora

Key Vocabulary: sort, notice, groups, sets, same, different

Pattern

Developing an awareness of pattern helps children to notice and understand mathematical relationships. Children should initially be taught to continue an AB pattern. Children need the opportunity to see a pattern, talk about what they can see and to continue a pattern. At first they may do this one object at a time e.g red cube, blue cube, red cube... verbalising the pattern helps. Children may then be asked to say what they would add next to continue it. For further progression in Pattern see **NCETM Early Years Typical Progression Chart – Pattern**.

Other resources

Pattern Fish – Trudy Harris

Lots and lots of Zebra Stripes – Stephen R. Swinburne

<https://nrich.maths.org/13250>

Key Vocabulary: pattern, continue, notice, next

Autumn 2

Size (1 week)	Using the language of size
Counting Principles (2 weeks)	One-one principles, stable-order principle, cardinal principle, abstraction principle, order-irrelevance principle
Comparing (2 weeks)	Comparing amount of objects

Size

At this stage only focus on large/big and small/little. Use real life examples of objects that are large and small in relation to each other. Begin with objects that are vastly larger/smaller than each other and move onto objects with a smaller difference in size. Include reasoning e.g. 'do you think this large tree would fit into my small box?'

Other resources

Big Bear, Small Mouse – Karma Wilson & Jane Chapman

Key Vocabulary: notice, big, large, small, little
 The _____ is smaller/larger than the _____.

Counting principles



1. **The one-one principle** – this involves children assigning one number name to each objects that is being counted. Children need to ensure that they count each objects that is being counted only once ensuring that they have counted every object. Children will sometimes count objects more than once or miss an object out that needs to be counted. Encourage children to line up objects and touch each one as they count saying one number name for each object. This will also avoid children counting more quickly than they touch the objects which again shows that they have not grasped one-one correspondence. When counting pictures children should use the strategy of drawing a line through each picture as they count it. Children should be taught number names through number songs and general counting.
2. **The stable-order principle** – children understand when counting that the numbers have to be said in a certain order. Children need to know all the number names for the amount in the group they are counting. Teachers can therefore encourage children to count aloud to larger numbers without expecting them to count that number of objects immediately. The order of numbers should be reinforced through number songs and daily counting activities.
3. **The cardinal principle** – Children understand that the number name assigned to the final object in a group is the total number of objects in that group. In order to grasp this principle, children need to understand the one-one and stable-order principles. From a larger group, children select a given number and count them out. When asked 'how many?' children should be able to recall the final number they said. Children who have not grasped this principle will recount the whole group again.
4. **The abstraction principle** – this involves children understanding that anything can be counted including things that cannot be touched including sounds and movements. When starting to count many children rely on touching the objects in order to count accurately. Teachers can encourage abstraction on a daily basis by counting claps or clicks.
5. **The order-irrelevance principle** – this involves children understanding that the order we count a group of objects is irrelevant. There will still be the same number. Encourage children to count objects left to right, right to left, top to bottom, bottom to top. Once children have counted a group, move the objects and ask children how many there are. If they count them all again they have not fully grasped this principle.

Other resources

NCETM Early Years Typical Progression Chart – Cardinality and Counting

Anno's Counting Book – M Anno

The Very Hungry Caterpillar – Eric Carle

Key vocabulary: count, how many, total, altogether, cardinal number

The cardinal number is _____.

Comparing

Children need progressive experiences where they can compare collections and begin to talk about which group has more things. When talking about amounts of objects use the language of more and fewer. Children should initially be taught perceptual comparing (comparing without counting). Initially the groups need to be very obviously different (e.g 2 objects and 7 objects). Move on to collection of small numbers of objects that are similar (e.g 1 and 3 objects) and then move onto different items but same quantity (using language of same or equal). For further progression in comparing **see NCETM Early Years Typical Progression Chart – Comparison.**

Key vocabulary: compare, more, fewer, same, equal

There are more _____ than _____ / there are fewer _____ than _____.

Spring Overview

Number & Place Value	Understanding Number 1
	Understanding Number 2
	Understanding Number 3
	Understanding Number 4
	Understanding Number 5
	Understanding Number 6

Guidance

Spring 1

Number One	Exploring and understanding number 1
Number Two	Exploring and understanding number 2
Number Three	Exploring and understanding number 3

When teaching numbers to 6 consider the counting principles at all times. Wherever possible, ensure that children are counting real-life objects. They could start by counting objects that are identical before moving on to counting objects that have slight difference e.g. different colours, different sizes, but make sure that the objects are of the same type. Encourage children to put objects in a line when counting so they have a clear start and end point. The five frame can be used to support children in lining up objects to count. It will also support children to subitise numbers within 5. Numerals may be introduced to children but they are not expected to write them at this stage. They could use drawings to represent their numbers.

Number 1

Throughout the 2 weeks the following should be explored:

- Number blocks episode 1
- Counting to 1
- Finding 1 object

- 1 being the first number, its position on a number line, ordinal numbers
- Numicon 1
- Dice 1
- Subitising 1
- Representing 1 on a 5 frame
- A circle – 1 sides shape (including in the environment)
- 1 action e.g. 1 hop, 1 jump, 1 clap
- The numeral and formation of 1
- Number 1 in the environment
- Representing 1 using marks, pictures and finger
- Matching numeral to quantity

Number 2

As above but also focus on what 2 is made of (1 is a part of me, 1 is a part of me and the whole of me is 2. **Note:** do not introduce children to addition or number sentences until Reception. Also look at separating the group of objects but knowing that the total is the same.

Number 3

As above (2 is a part of me, 1 is a part of me and the whole of me is 3). Exploring different varieties and orientations of triangles.

Other resources

<https://nrich.maths.org/13372>

Number Blocks Series 1: One; Series 1: 2; Series 1: 3; Series 1: One, Two, Three!

The Three Little Pigs

The Three Billy Goats Gruff

Goldilocks and the Three Bears

Key vocabulary: number, numeral, subitise, represent, how many, count, cardinal, first/second/third etc

Spring 2

Number Four	Exploring and understanding number 4
Number Five	Exploring and understanding number 5
Number Six	Exploring and understanding number 6

Number 4

Throughout the 2 weeks the following should be explored:

- Number blocks episode 4
- Counting to 4
- Finding 4 objects
- its position on a number line, ordinal numbers
- Numicon 4
- Dice 4

- Subitising 4
- Representing 4 on a 5 frame
- Squares and rectangles, including in the environment
- 4 actions e.g. 4 hops, 4 jumps, 4 claps
- The numeral and formation of 4
- Number 4 in the environment
- Representing 4 using marks, pictures and finger
- Matching numeral to quantity
- Composition of 4 (2 is a part of me, 2 is a part of me and the whole of me is 4; 3 is a part of me, 1 is a part of me and the whole of me is 4)

Number 5

As above (3 is a part of me, 2 is a part of me; 4 is a part of me, 1 is a part of me)

Number 6

As above (3 is a part of me, 3 is a part of me; 4 is a part of me 2, 2 is a part of me, 5 is a part of me 1 is a part of me). Explain 6 as being 5 and 1 more.

Other Resources

Sesame Street: Feist sings 1, 2, 3, 4 <https://www.youtube.com/watch?v=fZ9WiuJPnNA>

Number Blocks Series 1: Four; Series 1: 5; Series 1: 6; Series 1: How to Count; Series 1: The Whole of Me

Key vocabulary: number, numeral, subitise, represent, how many, count, cardinal, first/second/third etc

Summer Overview

Shape & Space	Shapes
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Measurement	Ordering the events of our day
	Length and Height
	Weight
	Capacity

Shape & Space	Positional Language
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Guidance

Summer 1

Shapes	Focus on properties of shapes
My Day	Ordering events of the day
Length and height	Long, short, tall and comparing lengths

Shapes

The primary focus in relation shapes should be on the properties of shapes. For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as 'straight/flat/round/curved'. When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. Note that only flat surfaces should be referred to as faces. Include sorting of natural shapes; the children may sort stones, for example, into sets that have straight edges, sets that have curved edges etc.

Other Resources

NCETM Early Years Typical Progression Chart –Shape and Space

<https://nrich.maths.org/13373>

Key vocabulary: edge, curve, straight, round, flat, sides, face, corner, smooth **Note: This is for staff to model.**

My Day

Children should explore talking about and ordering the events of their day such as waking up, coming to school, dinner, bed time. Encourage the vocabulary of first, next, then and possibly last.

Key vocabulary: first, next, then, last

Length and height

In the first stage children should be able to apply the attribute of long, short, tall etc to various examples (e.g. a bus is long; an adult is tall; grass is short). Adults should be continuously modelling this language. The children should then move on to finding objects that are longer/shorter than a given item. They should be encouraged to utilise strategies such as direct comparison (e.g. placing objects side by side to determine which is longer). When comparing length and height verbally children should be encouraged to use language such as 'taller than/longer than/shorter than'. When comparing lengths directly children need to ensure that they align the starting points and compare like-for-like (e.g. straightening skipping ropes before comparing lengths).

Other Resources

NCETM Early Years Typical Progression Chart – Measures

<https://nrich.maths.org/13374>

Key vocabulary: long, short, tall, longer than, shorter than, taller than
The _____ is longer/shorter/taller than the _____.

Summer 2

Weight	Light and heavy and comparison
Capacity	Full, half full, empty and comparison
Positional language	Using language related to position and direction

Weight

Initially begin with identifying objects the children think may be heavy – use lots of adult modelled language. Move on to comparing weights. One way to identify this is to identify that a heavier object creates a greater downwards pull. Ask children to hold a carrier bag; encourage them to notice if it feels as though their hand is being pulled down when something heavy is put in it. Place a carrier bag in each hand and identify which one is heavier by discussing which arm feels more pulled down. Explore the link to the balance scales to show that the heavier side goes down. Exemplify this with a see-saw 'What can we do to make this side of the see-saw go down?'. Ensure that children are presented with large but light objects and small but heavy objects to prevent the generalisation that big means heavy and small means light.

Other Resources

<https://nrich.maths.org/13374>

Key vocabulary: Heavy, heavier than, light, lighter than, balanced
The _____ is heavier than/lighter than the _____.

Capacity

Children should be given daily opportunity for sand and water play which can provide lots of opportunities to explore capacity. Children should be able to identify when a container is empty and full, and extend to half full. Initially children should be exposed to the comparison of full, half full, empty using the same container. However this can be moved on by talking about different size containers (e.g. I wonder whose pot will hold the most water?' When comparing capacities directly children can pour from one container to another to find which holds more or less water.

Other Resources

NCETM Early Years Typical Progression Chart – Measures

<https://nrich.maths.org/13374>

Key vocabulary: full, half full, empty, most, least
The container is full/half full/empty. The _____ holds the most/least water.

Positional language

Children need opportunities to be exposed to and to use the language of position and direction;
Position: 'in', 'on', 'under'. Direction: 'up', 'down', 'across'

Children also need opportunities to use terms which are relative: *'in front of', 'behind', 'on top of'.*

Create as many opportunities as possible to explore this language such as hunting for hidden objects with some prompts (e.g. look behind the shed).

Other Resources

NCETM Early Years Typical Progression Chart – Shape and Space

<https://nrich.maths.org/13373>

Key vocabulary: in, on, under, up, down, across, in front of, behind, on top of.
The _____ is (*position*) the _____.

Reception Mathematics White Rose



Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Getting to know you (Take this time to play and get to know the children!)			Just like me!			It's me 1, 2, 3!			Light and Dark		
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		

Autumn Term

Phase 1 - Just Like me			
NB links	S1- how to count	S1 - off we go	S4-pattern palace
	Week 1 Matching and Sorting (other book idea - 'Monkey Puzzle')	Week 2 Comparing size, mass, amounts, capacity	Week 3 Exploring patterns
1	Matching Buttons 'The Button Box'	Comparing size - little, small and big, large	Patterns - natural objects Repeating pattern a b a b
2	Matching Socks	Comparing quantities - more, fewer, full empty	Patterns - household objects Repeating pattern a b a b
3	Matching buttons with outlines	Comparing height - taller, shorter, tallest, shortest	Patterns - Colours/shape Repeating pattern a b a b
4	Sorting Buttons	Comparing length - longer and sorter	Patterns - Fruit - errors Repeating pattern a b a b
5	Sorting Natural objects	Comparing size -all vocab	Patterns - Going on a bear hunt. consolidate

Where's My Teddy/It's The Bear - Jez Alborough

The Bear In The Cave - Michael Rosen

Peace At Last - Jill Murphy

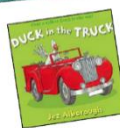
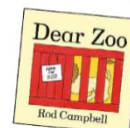
Seaweed Soup - Stuart J Murphy

Clean Up Everybody - Stacey Sparks

Beep Beep Vroom Vroom - Stuart J Murphy

The Button Box - Margarette S Reid.

Reading to children is
an essential part of
their development.
Any of these books
would be useful
during Phase 1



Monkey Puzzle - J.Donaldson

Frog and toad a lost button - Arnold Lobel

A squash and a squeeze - J.Don

The enormous turnip

My cat likes to hide in boxes - Eve Sutton

Noah's ark Snap games Pattern blocks

Jigsaws In and out the dusty bluebells

Clap your hands/ wiggles your fingers

Tongue twisters,

go noodle -banana banana meatball

Duck In the Truck - Jez Alborough

Dear Zoo - Rod Campbell

Mr Big - Ed Vere

Naughty Bus - Jan Oke

Crash Boom - Robbie R Harris

A New House For Mouse - Petr Horacek

The Right Place for Albert - Daphne Skinner

Phase 2 - It's me 1,2,3						
NB links	S1 - one	another one	two	three	S1 - one two three	S3 - zero
	Week 1 Representing 1,2,3 (Numberblocks 1,2,3)				Week 2 Composition of 1,2,3 Comparing 1,2,3	
1	'Anno's counting book' Representing 1				Sorting 1,2,3 Comparing - Who's got more?	
2	'Anno's counting book' Representing 2				Sorting 1,2,3 Matching 1,2,3	
3	'Anno's counting book' Representing 3				Subitise 1,2,3 Matching 1,2,3 pic/numeral	
4	Representing 1,2,3 Sorting 1,2,3 into groups				5 frame - count, represent and add 1,2,3 (buckets)	
5	Representing 1,2,3 Sorting/Matching 1,2,3				Towers - 1 more Hoop - Composition of 3	
					Week 3 Circles and triangles Positional Language	
					Mr Rush - triangle, Mr Happy - Circle - sorting	
					Kandinsky, Circle and triangle pictures	
					Going on a shape hunt	
					Positional language Where's the monkey?	
					Positional language Rosie's walk	

1 2 3 at the Zoo - Eric Carle
I'm Number One - Michael Rosen
One Bear at Bedtime - Mick Inkpen
The Little Bear and the Wish Fish - Debi Gliori
Pink Tiara Cookies for Three - Maria Dismondy
Number Farm - Stephen Holmes
Circle/Triangle - Mac Barnett and Jon Klassen



Goldilocks and the three bears
Three little pigs Three Billy goats gruff
We're going on a bear hunt - Michael Rosen
Rosies walk - Pat Hutchins Kandinsky
Little Red Riding Hood Go noodle-tri dance

Goldilocks went to the house of the bears My hat it has 3 corners
In and out the dusty bluebells Hickory dickory dock
Youtube - where's the monkey

The Mr Men Stories - Roger Hargreaves
Three Little Firefighters - Stuart J Murphy
Round is the Moon Cake - Roseanne Thong
Rosie's Walk - Pat Hutchins
Mrs Wishy-Washy - Joy Cowling
Me on a Map - Joan Sweeney
Each Peach Pear Plum - Janet & Allan Ahlberg

Phase 3 - Light and Dark						
NB songs - 5 little boats-counting and ordering 1-5, 5 speckled frogs-composition of 5, 1 less						
NB links	S1 - four	five	stampolines	S1	whole of me	terrible twos
	Week 1 Representing numbers to 5				Week 2 Composition of 4,5	
1	(4) Pete the cat and his 4 groovy Buttons - 5 frame				Ways to make 4,5 Counters/5 frame	
2	(5) Kipper's Birthday 5 frame				Ways to make 4,5 Cube shapes	
3	Counting to 4/5 5 frame/sorting 4,5				1 elephant came out to play 1 more/counting to 5	
4	Representing 4 Composition of 4				5 green bottles 1 less	
5	Representing and composition of 5 - Frogs				1 more/1 less Hiding in a bucket	
					Week 3 Shapes with 4 sides/Time	
					Subitise to 5 Rectangles, Squares/sorting	
					Subitise to 5 4 sided shape hunt	
					Subitise to 5 Shape pictures	
					Subitise to 5 Peace at last - Day/Night	
					Subitise to 5 Time - First, next, last	



Pete the Cat and his 4 Groovy Buttons–Eric Litwin
Witches Four – Marc Brown
Kipper's Birthday – Mick Inkpen
5 Little Fiends – Sarah Dyer
The Very Hungry Caterpillar- Eric Carle
Stella to Earth! – Simon Puttock
Square – Mac Barnett and Jon Klassen

Washing line – Jez Alborough
 Anno's counting book – Mitsumasa Anno
 5 little men in a flying saucer – Dan Crisp
 5 small stars – Ladybird
 The Gingerbread Man
 The Enormous Turnip
 Mr Strong – Roger Hargreaves



Bear in a Square – Della Blackstone
Fox in the Dark – Alison Green
Peace at last- Jill Murphy
Kipper's Monster – Mick Inkpen
Day Monkey, Night Monkey – Julia Donaldson
The Dark, Dark Tale – Ruth Brown
Funnybones – Janet & Allen Allberg

1	Do you want to build a snowman? – n Snowmen – Where can you see 1-5? Snowmen buttons – composition of 5
2	Snowflakes, snowflakes all around – matching 1-5 Subitise snowflakes to 5 Matching pairs – 1-5
3	Wrap up warm – sorting into categories Sorting summer/winter clothes
4	Dashing through the Snow – Positional language/Time Journey map of teddies walk – First, then, next, last
5	Special Delivery – Matching numeral to amounts Posting letters to the correct number

Spring Term

Phase 4 – Alive in 5			
Numberblocks links: (S1-Stampolines -Whole of me, -terrible 2's,-holes,-hide and seek)(S3 -Once upon a time, -NB express, -fruit salad -zero) NB songs – 5 little boats-counting/ordering 1-5, 5 speckled frogs-composition of 5/1less, Hen house hop			
	<u>Week 1</u> Introducing 0 Comparison to 5	<u>Week 2</u> Comparison to 5 Composition to 5	<u>Week 3</u> Comparing mass (2) Compare capacity
1	Subitise/composition to 5 One less – 5 Currant Buns	Subitise to 5. Composition of nos to 5 (2 groups)	Odd one out. Comparing mass – heavier and light than
2	Subitise/composition to 5 How many? Representing 0	Subitise to 5/composition How many altogether?	Odd one out Full and empty
3	Subitise/composition to 5 Composition of numbers to 5	Subitise to 5. Composition of nos to 5 (3 groups)	Find the number Measuring capacity
4	Subitise/composition to 5 Comparing numbers to 5	Subitise to 5/Composition How many are hiding?	Find the number. Capacity – How many fit inside?
5	Subitise/composition to 5 Equal and unequal groups	Subitise/Composition How many are hiding?	Find the number Measuring ingredients

None the Number – Oliver Jeffers
Zero is the Leaves on the Tree – Betsy Franco
A Squash and a Squeeze – Julia Donaldson
Room on the Broom – Julia Donaldson
I Spy Numbers – Jean Marzello
Who Sank the Boat – Pamela Allen

Alice the camel 10 in the bed 1 elephant came out to play
 5 little monkeys There's a hole in my bucket!
 Clip – Mary Poppins emptying her carpet bag
 5 friends counting – Oxford Owl



Balancing Act – Ellen Stoll Walsh
A Beach for Albert – Eleanor May
Anno's Counting book – Mitsumasa Anno
The Ugly Five – Julia Donaldson
The Blue Balloon – Mick Inkpen

Phase 5 – Growing 6,7,8

Numberblocks links: (S2 -six, -seven, -eight, -just add 1, -counting sheep, -double trouble, -fluffies)(S3 - Octoblock to the rescue)
NB songs – Scoop a scoop, Who has more?

	Week 1 6,7,8	Week 2 Making pairs Combining 2 groups	Week 3 Length and Height Time
1	Dice subitise. Which shows 6? Composition of 6	10 Frame - subitise Matching 6,7,8	Pic Cards - same/diff Comparing Height -Taller/Shorter
2	Sorting 6,7,8 Composition of 7	10 frame - subitise Making Pairs	Pic cards - same/diff Comparing length - Longer and Shorter
3	Dice odd one out Composition of 8	10 frame subitise Combining 2 groups	Pic cards - same/diff Days of the week
4	Dominoe subitise Matching 6,7,8	10 frame subitise Combining 2 groups	Pic cards - same/diff Measuring Height
5	1 More and less Kipper's Toybox	10 frame subitise Adding more	Pic cards - same/diff Measuring Time

Six Dinner Sid – Inga Moore

Kipper's Toybox – Mick Inkpen

Sidney the Silly Only Eats Six – M W Penn

Anno's Counting Book – Mitsumasa Anno

What the Ladybird Heard – Julia Donaldson

Simon's Sock – Sue Hendra

Pairs! In the Garden – Smriti Prasadam-Halls



Quack and count -Keith Baker
 The elephant and the bad baby
 Don't forget the bacon - Pat Hutchins
 The bad tempered ladybird - Eric Carle
 5 minutes peace - Jill Murphy
 10 fat sausages 1 2 buckle my shoe Noah's ark
 Dice/board games Days of the week

The Giraffe who got a Knot – John Bush

Titch – Pat Hutchins

Tall – Jez Alborough

Jack and the Beanstalk – Traditional

Jim and the Beanstalk – Raymond Briggs

Mr Wolf's Week – Colin Hawkins

Jasper's Beanstalk - Nick Butterworth

Phase 6 – Building 9 and 10

Numberblock links: (S2- nine, -ten, -blast off, -three threes, -ten green bottles) (S3- blockzilla, - Now we are 6-10, - numberblobs building blocks, - hiccups -what's the difference, - flatland,- pattern palace)
NB songs – Days of Spring, How many passengers?, zoom zoom zoom

	Week 1 9 and 10	Week 2 Comparing numbers to 10 Bonds to 10	Week 3 3D shapes Pattern
1	Show 9 and 10 on fingers Representing/sorting 9,10	No line to 10 - spot mistake Counting back from 10 - 10 in a bed	How many more to make 10 - fingers Building with 3D shapes
2	10 frame subitise to 10 Representing/sorting 9,10	No line to 10 - spot mistake Comparing numbers within 10	10 frame - Bonds to 10 Matching 3D shapes
3	10 frame subitise to 10 Ordering numerals to 10	No line to 10 - spot mistake Comparing numbers within 10	Numicon - Bonds to 10 Printing with 3D shapes
4	10 frame subitise to 10 10 Black dots - Composition of 9 and 10	No line to 10 - spot mistake Making 10	10 frame - Bonds to 10 Pattern - Pattern Fish
5	10 frame subitise to 10 Numbers to 10 Bingo	No line to 10 - spot mistake Making 10	Numicon - Bonds to 10 Pattern - Movement

How do Dinosaurs Count to 10? - Yolen & Teague

One Gorilla – Atsuko Morozumi

Mouse Count – Ellen Stoll Walsh

Nine Naughty Kittens – Linda Jenny

Feet for 10 – Catherine Eckwell



The Napping House – Audrey Wood & Don Wood

Engines Engines –L Bruce & S Waterhouse

Mouse Shapes – Ellen Stoll Walsh

Changes Changes – Pat Hutchins

Number blocks series 2, 9 and 10, Blastoff
 Number bond rhymes (Farmer Pete) 5 eggs and 5 eggs
 Chuck, chuck, chuck We Will Rock You - Queen (Clap)
 Go Noodle - Banana, Banana meatball

Mr Willy-Nilly and Zoey's dream - Seung-yim Bak Rapunzel Princess and the pea

Spring Consolidation

Numberblocks links - (S2 Numberblock castle) (S3 - ten again, peekaboo, - Octoblock to the rescue, -five and friends, -
 The legend of Big tum, (S5 - Now you see us-drawing numbers, What's my number?
 NB songs - How many passengers, Let's all draw numbers


	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>
	Composition Subitising Comparison Counting on and Back Matching Numeral Recognition Ordering		
1	Domino odd one out. Hopscotch No recognition	Combining 2 dice Who has more - compare	Count on/back from diff nos Trellis track game
2	Domino odd one out. Snap with no and pic cards	Combining 2 groups Combining 2 groups	Count on/back from diff nos Composition of 10
3	Domino odd one out. 10 frame fill game	Combining 2 groups Treasure hunt to 10	I count you count-1 no Composition of 9
4	Domino odd one out. Bean bag throw. Composition of 6	Combining 2 groups Composition of 8	I count you count-2 nos What do you notice?
5	Domino odd one out. Composition of 6	Combining 2 groups Composition of 7	I count you count-3 nos Estimation

Summer Term


Phase 7 - To 20 and Beyond

Numberblocks links - (S3 -Numberblock rally, -eleven, -twelve, -the way of the rectangle, -ride the rays, -block star,
 -thirteen, -fourteen, -fifteen, -tween scenes, -step squads (S4-fifteen minutes of fame, -On your head)(S5-ten vaulting)

	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>
	Building Numbers beyond 10	Counting patterns beyond 10	Spatial Reasoning
1	No bonds to 5 - frogs Number Patterns to 20	I count you count 11-20 2 nos Missing Numbers	I count you count 11-30 1 no Find my match with shapes
2	No bonds to 5 - chicks Matching picture to numeral	I count you count 11-20 2 nos Ordering numbers to 20	I count you count 11-30 2 nos Find my match with models
3	No bonds to 5 - cherries 10 Frame fill beyond 10	11-20 Spot the mistake Race to 20 game	I count you count 11-30 3 nos Match and fill
4	X-ray vision no line to 10 Estimating Game	11-20 Spot the mistake Bingo with numbers to 20	I count you count 21-40 1 no Replicate my model

5	X-ray vision no line to 10 10 frame subtraction game	11-20 Spot the mistake Which holds most?	I count you count 21-40 2 nos Tangrams
Jack The Builder – Stuart J Murphy One Moose, 20 Mice – Stella Blackstone One to 10 and Back Again – Nick Sharratt A Dozen Ducklings Lost and Found – Harriet Ziefert Which is Round? Which is Bigger? – Mineko Marmada 1 is a Snail, 10 is a Crab – April Sayre & Jeff Sayre		Reading to children is an essential part of their development. Any of these books would be useful during Phase 7 	1 is One – Tasha Tudor The Real Princess – Brenda Williams 10 on a Train – John O'Leary 20 Big Trucks in the Middle of the Street – Mark Lee Snail Trail: A Journey Through Modern Art – Jo Saxton Which One Doesn't Belong – Christopher Danielson

Phase 8 – First, Then, Now			
Numberblocks links –(S4 -ten's place, -balancing bridge, -sixteen, -square club, -seventeen, -eighteen,-loop the loop, -nineteen, -twenty, -tall stories, -flights of fancy, -I can count to twenty)			
	<u>Week 1</u> Adding More	<u>Week 2</u> Taking Away	<u>Week 3</u> Spatial Reasoning
1	Putting 3 numbers in order Track game – Counting on	Put 3 pic cards in order Taking away with pebbles	Numbers bonds to 5 Making new shapes with 2 right angle triangles
2	Putting 3 numbers in order Adding more (1)	Put 3 pic cards in order Taking Away – Kipper's Toybox	Numbers bonds to 5 Making new shapes with Squares
3	Putting 3 numbers in order Adding more (2)	Put 3 pic cards in order Taking Away – Green Bottles	Number Bonds to 5 Grandpa's Quilt
4	Putting 3 numbers in order Adding more – Unknown then	Put 3 pic cards in order Taking Away – Unknown then	Composition 4,6 Making new shapes with Tangrams
5	Putting 3 numbers in order Adding more – First Unknown	Put 3 pic cards in order Pass it on game	Match outline/shape Pattern Blocks

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 Tad – Benji Davis	Reading to children is an essential part of their development. Any of these books would be useful during Phase 8 	The Shopping Basket – John Burningham Monster Math – Anne Miranda Elevator Magic – Stuart J Murphy Grandpa's Quilt – Betsy Franco Jack and the Flumflum Tree – Julia Donaldson Pezzettino – Neo Lionni
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Phase 9 – Find my Pattern			
Numberblocks links –(S2 -odds and evens, -the two tree) (S3 - mirror mirror, -the wrong number, (S4 -heist, -sign of the times, -fun time fair, -the lair of shares, -terrible twosday, - divide and drive (S5 - Your turn) NB songs - Counting cars			
	<u>Week 1</u> Doubling	<u>Week 2</u> Sharing and Grouping	<u>Week 3</u> Even and Odd Spatial Reasoning
1	Match no to pic bingo	Dots-What can you see?	Dots-What can you see?

	Doubling	Sharing	Even and Odd (1)
2	Match no to added dice pic Doubling (2)	Dots-What can you see? Teddy Bear picnic	Dots - What can you see? One Odd day
3	Match no to domino pic Doubling dice game	Dots-What can you see? The Doorbell rang	Dots-What can you see? Even and Odd (2)
4	Spot change on 11-20 no line Doubling barrier game	Counter arrangements Grouping	Beanbag subtract from 10 How many cubes?
5	Spot change on 11-20 no line Domino game	Counter arrangements Grouping (2)	Beanbag subtract from 7 Barrier Game

This is the Story of Alison Hubble - Allan Ahlberg

Two of Everything - Lilly Hong

Double Dave - Sue Hendra

Double the Ducks - Stuart J Murphy

The Doorbell Rang - Pat Hutchins

The Gingerbread Man - Traditional

Bean Thirteen - Matthew McElligott

One Hungry Cat - Joanne Rocklin

Reading to children is an essential part of their development. Any of these books would be useful during Phase 9



the Move

Ness the Nurse - Nick Sharratt

One Odd Day - Doris Fisher

Pete the Cat and the Missing Cupcakes - K & J Dean

Underwater Counting - Jerry Pallotta

What the Ladybird Heard - Julia Donaldson

Rosie's Walk - Pat Hutchins

Mr Gumpy's Motor Car - John Burningham

Numberblocks links - (54-Twenty one and on, -we're going on a square hunt, -thirty's big top, -land of the giants)

NB songs - Counting cars - counting in 1's, 2's, 3's

	<u>Week 1</u> Deepening understanding problem solving	<u>Week 2</u> Patterns and Relationships	<u>Week 3</u> Spatial Reasoning
1	Subtract from 6 Harry and his bucketful of dinosaurs - subtracting	Dice Doubles Cuisinaire rods	How many counters? No bonds to 10 Making maps from stories - Little Red Riding Hood
2	Subtract from 10 Mr Gumpy's outing - problem solving - counting legs	Domino doubles Cuisinaire rods 2	How many counters? No bonds to 10 Making maps - Journey to school
3	Subtract from 7 How many legs - problem solving	Numicon doubles Bean Bag game	How many counters? No bonds to 10 Making maps - obstacle course
4	Subtract from 8 Making Boats - capacity	10 frame arrangements (6) Pattern fish - Patterns	How many counters? No bonds to 10 X Marks the spot
5	Subtract from 9 Making Bridges - length	10 frame arrangements (8) Pattern	How many counters? No bonds to 10 Designing mazes