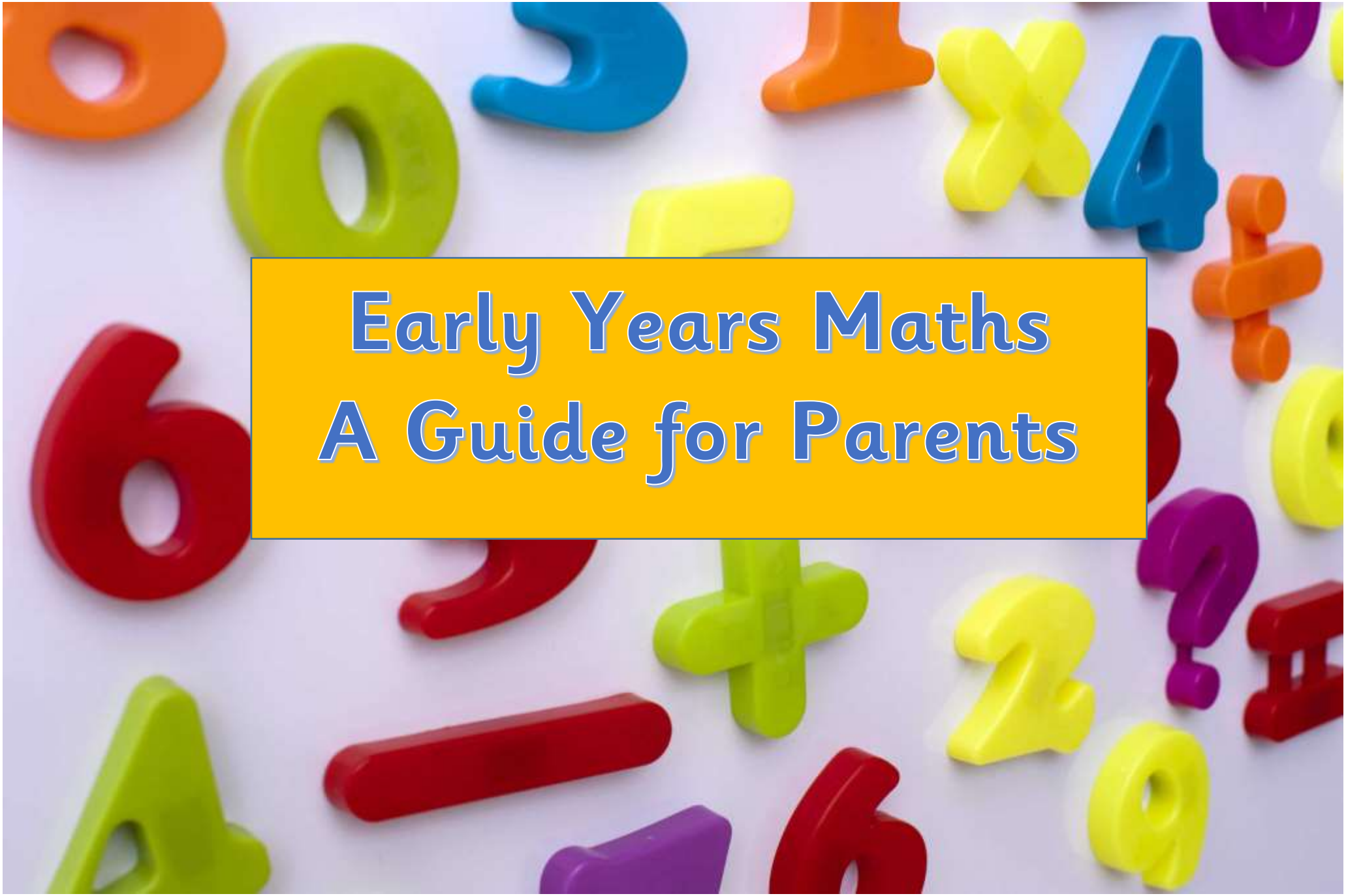

Early Years Maths
A Guide for Parents

The Maths Curriculum in the Early Years Foundation Stage

The Maths area of learning and development is split into two aspects: **Numbers and Numerical Patterns.**
The table below demonstrates the progression of mathematical knowledge, understanding and skills as the children transition throughout the Reception year in school. The box highlighted in grey is the Early Learning Goal (ELG) for Maths. All children will be assessed against the Maths ELG at the end of the year. This is reported to parents and the Local Authority.

Area of Learning		3-4 years Range 5 (36 - 48 months)	4-5 years Range 6 (48 - 60 months)	ELG (60 – 71 months)
MATHEMATICS	NUMBER	**Counting:** Show 'finger numbers' up to 5. May enjoy counting verbally as far as they can go Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Uses some number names and number language within play, and may show fascination with large numbers. Begin to recognise numerals 0 to 10. **Cardinality:** Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Subitises one, two and three objects (without counting). **Composition:** Solve real world mathematical problems with numbers up to 5. Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers. Beginning to use understanding of number to solve practical problems in play and meaningful activities. Beginning to recognise that each counting number is one more than the one before. Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same.	**Counting:** Count beyond 10. Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0. Increasingly confident at putting numerals in order 0 to 10 (ordinality). **Cardinality:** Count objects, actions and sounds. Subitise (Engages in subitising numbers to four and maybe five) Link the number symbols (numeral) with its cardinal number value. Counts out up to 10 objects from a larger group. Matches the numeral with a group of items to show how many there are (up to 10). **Composition:** Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers up to 10. Automatically recall number bonds for numbers 0-10. Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects. Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three. Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-"	**Have a deep understanding of number to 10, including the composition of each number.** **Subitise (recognise quantities without counting) up to 5.** **Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.**

	NUMERICAL PATTERNS	**Comparison:** Compare quantities using language: 'more than', 'fewer than'. Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same! **Shape:** Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. Combine shapes to make new ones - an arch, a bigger triangle etc. (Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes / Attempts to create arches and enclosures when building, using trial and improvement to select blocks). Shows awareness of shape similarities and differences between objects. **Spatial Awareness:** Understand position through words alone – for example, "The bag is under the table," –with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Predicts, moves and rotates objects to fit the space or create the shape they would like **Measures:** Make comparisons between objects relating to size, length, weight and capacity. In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items. Recalls a sequence of events in everyday life and stories. **Patterns:** Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next.	**Comparison:** Compare numbers Uses number names and symbols when comparing numbers, showing interest in large numbers. Estimates of numbers of things, showing understanding of relative size. **Shape:** Compose and decompose shapes so that children recognise a shape can have other shapes *within* it, just as numbers can. Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes. Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. **Spatial Awareness:** Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints. Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning). May enjoy making simple maps of familiar and imaginative environments, with landmarks. **Measures:** Compare length, weight and capacity. Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy. Becomes familiar with measuring tools in everyday experiences and play. Is increasingly able to order and sequence events using everyday language related to time. Beginning to experience measuring time with timers and calendars. **Pattern:** Continue, copy and create repeating patterns. Spots patterns in the environment, beginning to identify the pattern "rule". Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat.	**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.**

Here are the five counting principles taught throughout the Reception year:

PRINCIPLES	
1 **The one-one principle**. This involves children assigning one number name to each object that is being counted. Children need to ensure that they count each object only once ensuring 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 per object. This will also help to avoid children counting more quickly than they touch the objects which again shows they have not grasped one-one correspondence.
2 **The stable-order principle**. Children understand when counting, 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.
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 principle. After counting a group of objects and asking '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 e.g. jumps.	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. They can also count imaginary objects in their head to encourage counting on, this involves the children visualising objects.
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 and 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.

Why is there such a big focus on early numbers?

It is important that children develop a really strong sense of numbers to 10. This will stand them in good stead for the maths that follows as they move through school. This includes:

- Understanding the link between numbers and quantity (representing numbers in many ways)
- Investigating how quantities are composed of smaller parts (6 can be two 3's or three 2's or 4 and two ones or 5 and 1 etc.)
- Knowing how numbers relate to one another and being able to compare and order them.
- Exploring how quantities change when you add more items or take items away.

The children may already be able to recite the number names to twenty and beyond but a sense of what those numbers mean develops gradually with repeated experiences in different contexts.

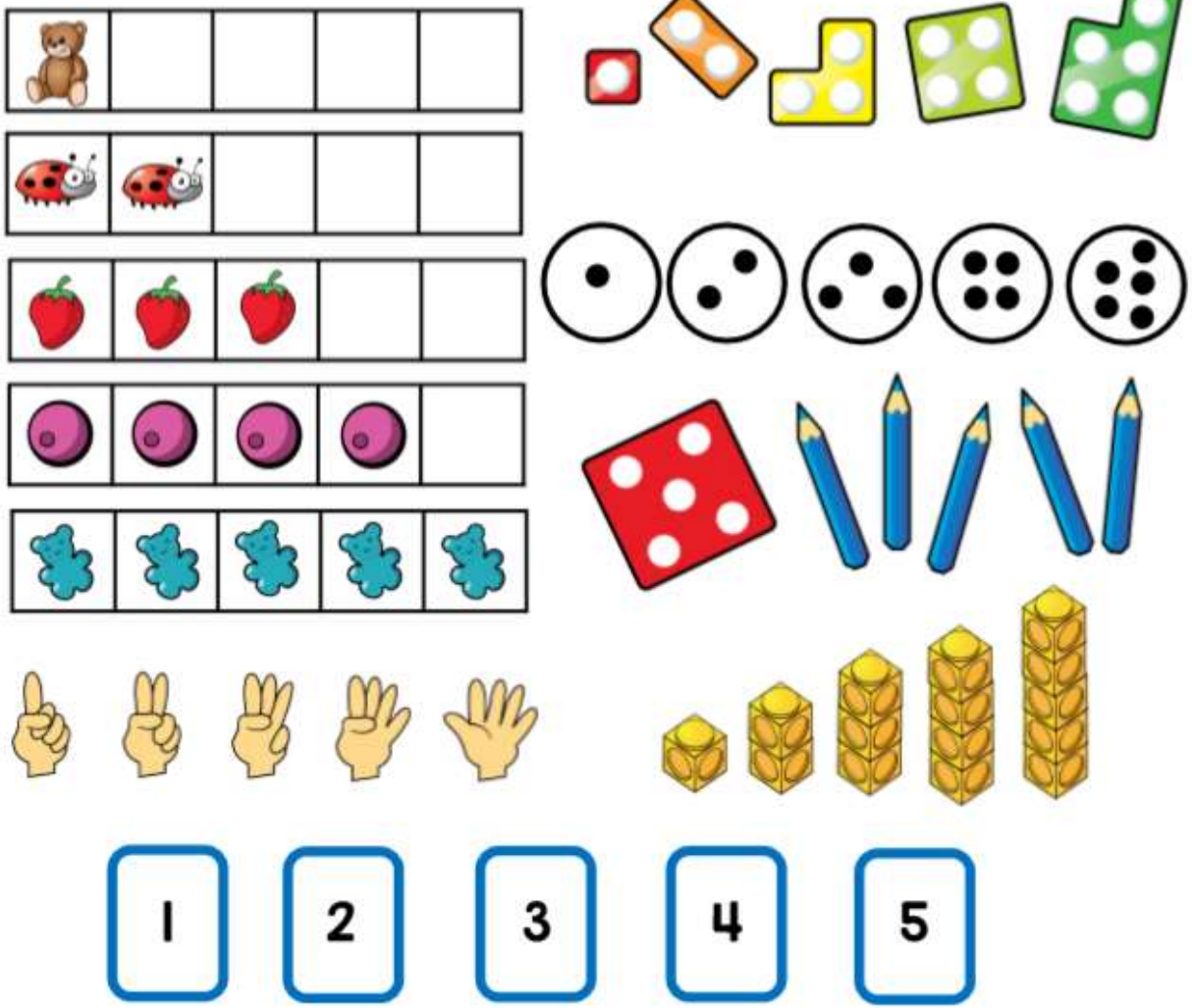
At Headlands Primary School, we follow the Mastering Numbers and White Rose Maths schemes.
We have divided the Reception Year into half term blocks. Each half term has five dedicated weeks focusing upon the Mastering Number element of the Maths curriculum. Additional opportunities are provided throughout the term to focus on the measure, shape and spatial thinking. There will also be time for consolidating and embedding the children's mathematical knowledge, understanding and skills.

Autumn Term: Phases 1, 2, 3

Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5
Focus	Subitising	Counting, ordinality and cardinality	Composition	Subitising	Comparison
	Subitising within 3	Focus on counting skills	Explore how all numbers are made of 1s Focus on composition of 3 and 4	Subitise objects and sounds	Comparison of sets - 'just by looking' Use the language of comparison: *more than* and *fewer than*
Autumn 2	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**
Focus	Counting, ordinality and cardinality	Comparison	Composition	Composition	Counting, ordinality and cardinality
	Focus on counting skills Focus on the 'five-ness of 5' using one hand and the die pattern for 5	Comparison of sets - by matching Use the language of comparison: *more than, fewer than, an equal number*	Explore the concept of 'whole' and 'part'	Focus on the composition of 3, 4 and 5	Practise object counting skills Match numerals to quantities within 10 Verbal counting beyond 20

Autumn Term:

Key Representations



Notes and guidance

When teaching counting, consider the counting principles at all times.
At this early stage, ensure that children are counting real-life objects. They could start by subitising and counting objects that are identical before moving on to subitising and counting objects that have slight differences such as size or colour. Make sure that the objects are of the same type e.g. apples, cubes, books.

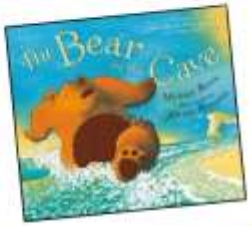
Encourage children to put objects into a line when counting so they have a clear start and end point.
The five frame can be used to support children to subitise and compare numbers within 5

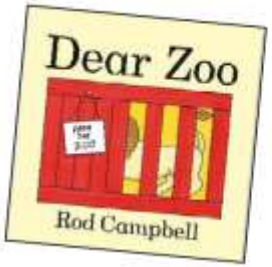
Numerals may be introduced to children but they are not expected to write them at this stage. They could use informal jottings and/or drawing to record their thinking.

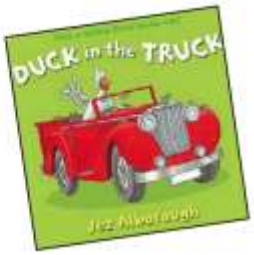
Phase 1 – Book List

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.
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

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



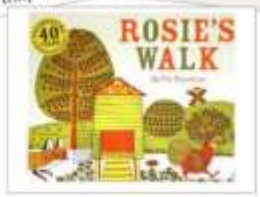




Phase 2 – Book List

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
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

Reading to children is an essential part of their development. Any of these books would be useful during Phase 2 alongside traditional tales such as Goldilocks and the Three bears, The Three Billy Goats Gruff and Little Red Riding Hood.



Phase 3 – Book List

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
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

Reading to children is an essential part of their development. Any of these books would be useful during Phase 3 alongside traditional tales such as The Enormous Turnip and The Gingerbread Man.

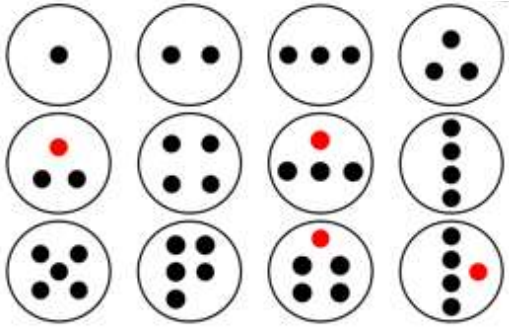
Here are a list of books to support the Autumn terms Maths units of work.

Spring Term: Phases 4, 5, 6

Spring 1	Week 11	Week 12	Week 13	Week 14	Week 15
Focus	Subitising	Counting, ordinality and cardinality	Composition	Composition	Composition
	Subitise within 5 focusing on die patterns Match numerals to quantities within 5	Counting – focus on ordinality and the 'staircase' pattern See that each number is one more than the previous number	Focus on 5	Focus on 6 and 7 as '5 and a bit'	Compare sets and use language of comparison: *more than, fewer than, an equal number to* Make unequal sets equal
Spring 2	**Week 16**	**Week 17**	**Week 18**	**Week 19**	**Week 20**
Focus	Counting, ordinality and cardinality	Comparison	Composition	Composition	Composition
	Focus on the 'staircase' pattern and ordering numbers	Focus on ordering of numbers to 8 Use language of *less than*	Focus on 7	Doubles – explore how some numbers can be made with 2 equal parts	Sorting numbers according to attributes - odd and even numbers

Spring Term - Key Representations:

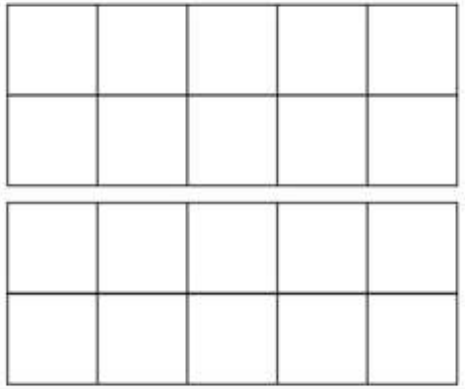
Dot Patterns



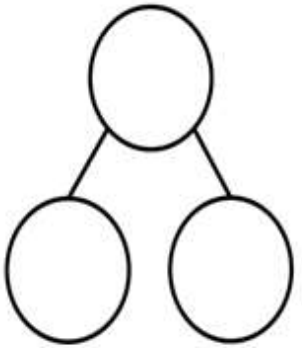
Number of the Day

Fewer	The same as	More

Ten Frames

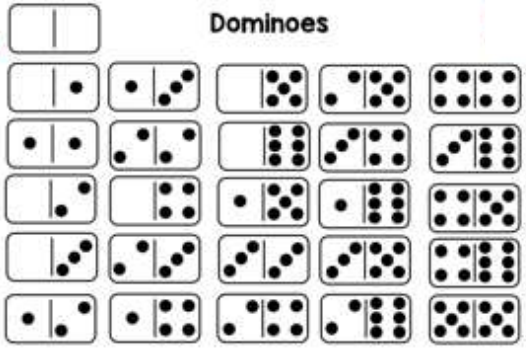


Part-whole Model



Digit Cards

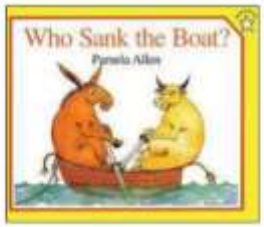
Dominoes



Phase 4 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during Phase 4

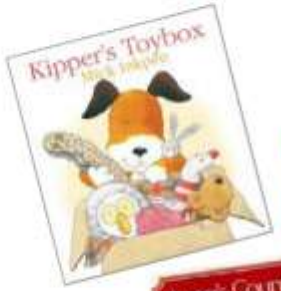
None the Number - Oliver Jeffers
Zero is the Leaves on the Tree – Betsy Franco
A Squash and a Squeeze – Julia Donaldson
Room on the Broom – Julia Donaldson
I Spy Numbers – Jean Marzello
Who Sank the Boat – Pamela Allen
Balancing Act – Ellen Stoll Walsh
A Beach for Albert – Eleanor May
Anno's Counting book – Mitsumasa Anno
The Ugly Five – Julia Donaldson
The Blue Balloon – Mick Inkpen

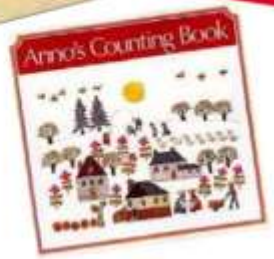


Phase 5 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during the phase Growing 6, 7, 8

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
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

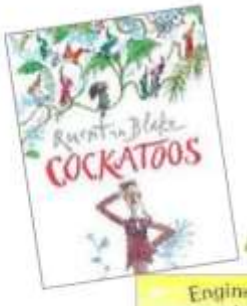


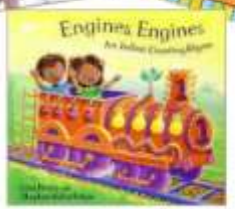


Phase 6 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during the phase Building 9 & 10

How do Dinosaurs Count to 10? - Yolen & Teague
One Gorilla – Atsuko Morozumi
Mouse Count - Ellen Stoll Walsh
Nine Naughty Kittens – Linda Jenny
Feast for 10 - Cathryn Falwell
Cockatoos – Quentin Blake
Mr Magnolia – Quentin Blake
Ten Black Dots – Donald Crews
The Napping House – Audrey Wood & Don Wood
Engines Engines - L Bruce & S Waterhouse
Mouse Shapes – Ellen Stoll Walsh
Changes Changes – Pat Hutchins
Pattern Bugs – Trudy Harris
Busy Busy Busy - Haneul Ddang
Pattern Fish – Trudy Harris





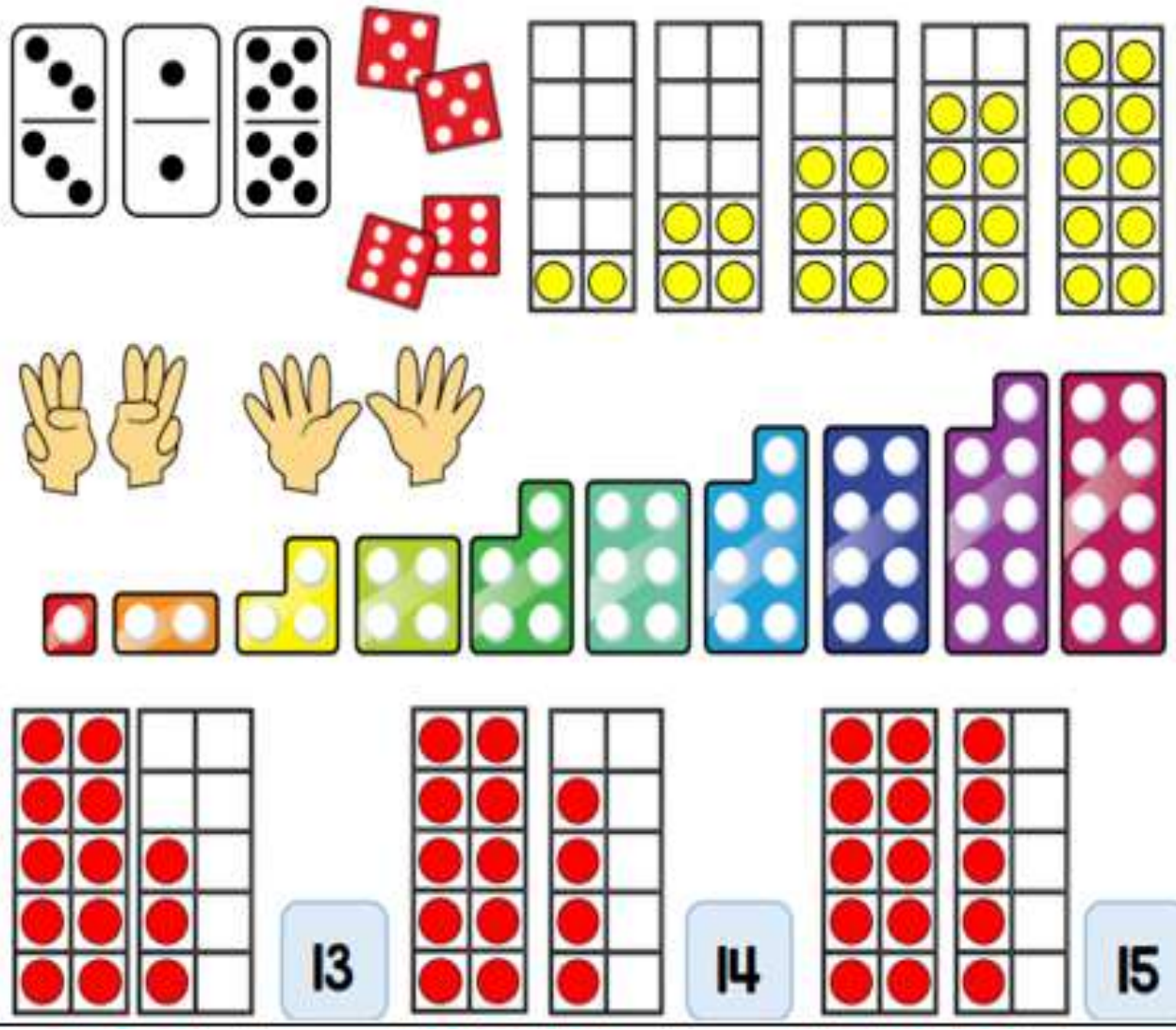
Here are a list of books to support the Spring terms Maths units of work.

Summer Term: Phases 7, 8, 9, 10

Summer 1	Week 21	Week 22	Week 23	Week 24	Week 25	
Focus	Counting, ordinality and cardinality	Subitising	Composition	Composition	Comparison	
	Counting – larger sets and things that cannot be seen	Subitising – to 6, including in structured arrangements	Composition – '5 and a bit'	Composition - of 10	Comparison – linked to ordinality Play track games	
Summer 2	**Week 26**	**Review and assess**	**Review and assess**	**Review and assess**	**Review and assess**	**Review and assess**
	Subitise to 5 Introduce the rekenrek	Automatic recall of bonds to 5	Composition of numbers to 10	Comparison	Number patterns	Counting

Summer Term - Key Representations:

Key Representations



Maths

Notes and guidance

Ten frames can continue to be used to represent numbers to 10 (and then 20) Encourage the children to represent the first, then, now stories on the ten frames as they add more and take away.

Domino and dice games can be used to introduce children to the concept of doubles. Fingers are another good way to represent doubles. Representing the even numbers pair-wise on 10 frames supports the children to make the link between doubling and halving.

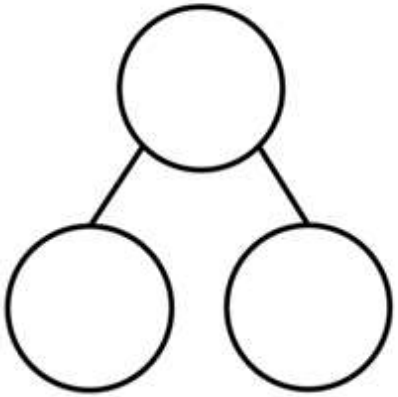
Pair-wise 10 frames and number shape pieces are useful for illustrating the odd and even pattern of numbers and for sorting into odd and even.

Numbers to 20 can be represented using the number shapes and 10 frames. Prompt the children to see that there is one full 10 and part of the next 10

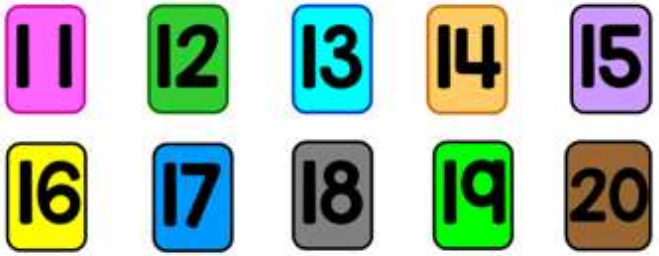
Number of the day

One Less		One More

Part-whole Model



Digit Cards



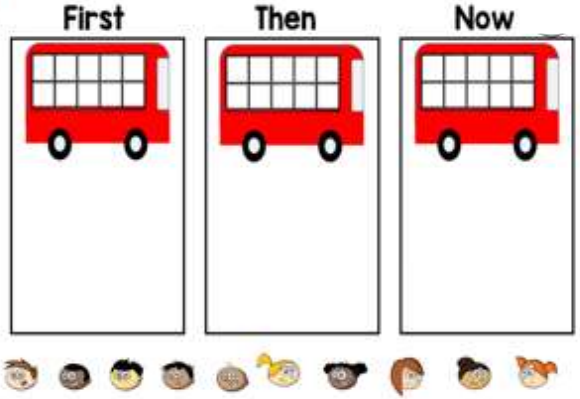
Number tracks

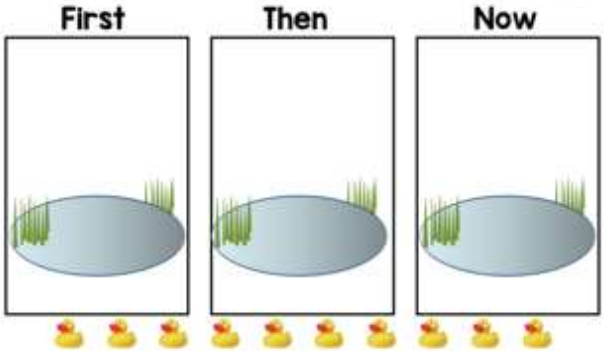
1	2	3	4	5	6	7	8	9	10

11	12	13	14	15	16	17	18	19	20

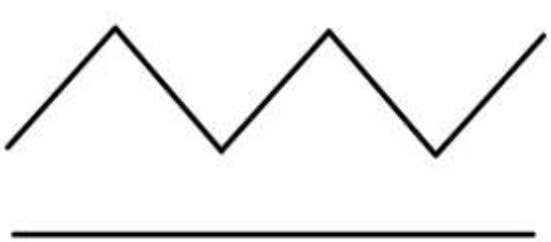
1	2	3	4	5	6	7	8	9	10

11	12	13	14	15	16	17	18	19	20

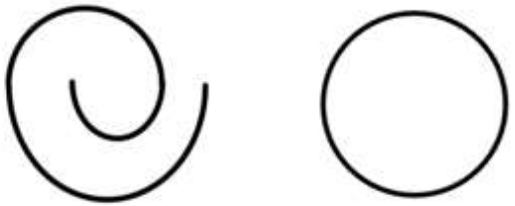




Pattern maps



Pattern maps



Here are a list of books to support the Summer terms Maths units of work.

Phase 7 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during Phase 7

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
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 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during Phase 8

Mouse Count – Ellen Stoll Walsh
Mr Gumpy's Outing – John Burningham
Rosie's Zoo – Allie Busby
One Ted Falls Out of Bed – Julia Donaldson
Quack and Count – Keith Baker
My Granny Went to Market – Stella Blackstone
Tad – Benji Davis
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

Phase 9 – Book List

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

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
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

Phase 10 – Book List

Reading to children is an essential part of their development. Any of these books would be useful during Phase 10

Mr Gumpy's Outing – John Burningham
Billy's Bucket – Kes Gray
Mr Archimede's Bath – Pamela Allen
Who Sank the Boat – Pamela Allen
How Many Legs – Kes Gray
Pattern Bugs & Pattern Fish – Trudy Harris
The Secret Path – Nick Butterworth
Me on the Map – Joan Sweeney
Little Red Riding Hood – Traditional
If I Built a House – Chris Van Dusen
Once Upon a Time Map Book – B.G. Hennessy
In Every House on Every Street – Jess Hitchman

Key Language for Teachers

Cardinal - The number that indicates how many there are in a set.

Classification – The identification of an object by specific attributes, such as colour, texture, shape or size.

Conservation (of number) – The recognition that the number stays the same if none have been added or taken away.

Numeral - The written symbol for a number; e.g. 3, 2, 1

Ordinal - A number denoting the position in a sequence e.g. 1st, 2nd, 3rd, etc or page 1, page 2, page 3…

Partition - Separate a set into two or more subsets e.g. Partition a set of socks into plain and patterned.

Subitise - Instantly recognise a small quantity, without having to count how many there are.

Number - Number can be:

- a count of a collection of items e.g. three boxes,
- a measure e.g. of length or weight, or
- a label e.g. the number 17 bus

Quantity - The amount you have of something e.g. a cup of flour, three boxes, half an hour.

Here is a summary of the mathematical vocabulary that the children will be exposed to throughout the Reception year at school.

Headlands Primary School
Maths Vocabulary for Reception

Numbers and the number system	Calculating	Exploring Length	Describing Position	Exploring Weight	Exploring Capacity	Understanding Time	Using Money	Describing patterns	Describing Shape
Numbers zero, one, two, three ... to twenty (and beyond), Teens, eleven, twelve None How many? Count on (to and from) Count up (to) Count back (to or from) Count in ones, twos, fives and tens, Same as, equals, balances, as many as More, larger, bigger, greater, biggest, most Less, fewer, smaller, smallest, least Odd, even Pattern Ones, tens, digits Compare, order, size	Numbers zero, one, two, three ... to twenty (and beyond), Teens, eleven, twelve None How many? Count on (to and from) Count up (to) Count back (to or from) Count in ones, twos, fives and tens, Same as, equals, balances, as many as More, larger, bigger, greater, biggest, most Less, fewer, smaller, smallest, least Odd, even Pattern Ones, tens, digits	Measure, size, compare, guess, estimate Enough, not enough, too much, too little, too many, too few Nearly, closely to, about the same as, just over, just under, bend, stretch Length, height, width Long, short, tall High, low Wide, narrow, thick, thin, depth, deep, shallow, Longer, shorter, taller, higher Lowest, shorter, taller, higher	Position Over, under, above, below, top, bottom, side On, in, outside, inside, around, in front of, behind, back, front, turn Beside, next to, opposite, apart, between, middle, edge, corner Direction, left, right, up, down Forwards, backwards, sideways Across, next to, close, near, far Along, through, to, from, towards, away from	Measure, size, compare, guess, estimate Enough, not enough, too much, too little, too few Nearly, close to, about the same as, just over, just under Weight, weighs, weighs the same as, balances, heavy, light, heavier than, lighter than, heaviest, lightest, scales	Measure, size, compare, guess, estimate, Enough, not enough, too much, too little, too few Nearly, close to, about the same as, just over, just under Full, empty, holds, container, half full, holds more, holds less	Time Days of the week (Monday, Tuesday etc) Day, week Birthday, holiday, morning, afternoon, evening, night Bedtime, dinner time, playtime Today, yesterday, tomorrow Before, after, now, soon, early, late Quick, quicker, quickest, quickly Slow, slower, slowest, slowly Old, older, oldest New, newer, newest Takes longer, takes less time, hour, o'clock Clock, watch, hands	Measure, size, compare, guess, estimate Enough, not enough, too much, too little, too many, too few Nearly, close to, about the same as, just over, just under Full, empty, holds, container, half full, holds more, holds less, half empty Change, costs more, cheap, costs less, cheaper, same as, How much? How many? Total	Count, sort, group, set, list Pattern, puzzle, repeating pattern Bigger, larger, smaller Symmetrical What could we try next? How did you work it out? Recognize, describe, draw, compare	Count, sort, group, set, list Shape, pattern, flat, curved, straight, round, hollow, slide, end slide, roll <u>2D shape</u> vertex, side, rectangles (including square), circle, triangle <u>3D shapes</u> Face, edge, vertex, vertices cube, pyramid, sphere, cone cuboid cylinder

First, second, third … last, before, after, next, between Guess, estimate, nearly, close to, about, just over, just under, too many, too few, enough, Every other How many times, pair	Add more, and make, total, sum One more How many more to make? How many is … than …? Take away Subtract Subtraction One less How many are left? How many are gone? How many fewer is … than …? Difference between Sharing, doubling, halving Parts of a whole, half, quarter Symbol, sign	Longest, shortest, tallest, highest Far, near, close				Measure, size, compare, guess, estimate Next, last			

Web link to how we teach Maths in Reception: https://www.youtube.com/watch?v=2Ow8vEmh8lA

Reception – Notes and Guidance

Important Links and Websites

The NCETM Early Years Area

The aim of this section is to help teachers and practitioners in Early Years settings have a clearer understanding of how children build early number sense, and to provide tips on how best to support that learning.
https://www.ncetm.org.uk/resources/51439

Number Blocks

Numberblocks, first broadcast in January 2017, is a pre-school BBC television series aimed at introducing children to early number.
Snappy animation and loveable characters combine with engaging storylines to gently introduce concepts of number to support early mathematical understanding.

https://www.bbc.co.uk/cbeebies/shows/numberblocks

NRICH

The NRICH Early Years resources aim to further develop young children's natural problem-solving abilities in the context of mathematics.
https://nrich.maths.org/early-years

Learning Trajectories

[LT]^2 is a web-based tool for early childhood educators to learn about how children think and learn about mathematics and how to teach mathematics to young children (birth to age 8).
https://www.learningtrajectories.org/

Early Math Collaborative

The Erikson Institute Early Math Collaborative is transforming the understanding, teaching and learning of early mathematics from the ground up.
https://earlymath.erikson.edu/

EEF Improving Mathematics in the EY and KS1

This guidance report summarises the latest research into early maths education and offers 5 practical recommendations for teachers to support the learning of children aged 3-7.
https://educationendowmentfoundation.org.uk/tools/guidance-reports/early-maths/