

EYFS Maths Yearly 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	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me!			It's Me 1 2 3!			Light and Dark			Consolidation	
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation				
Summer	To 20 and Beyond			First Then Now			Find My Pattern			On The Move				

- We have divided the Reception Year into 10 Phases. Each phase roughly lasts 3 weeks long, allowing time for flexibility and consolidation.
- Each phase has a number focus and suggested links to measure, shape and spatial thinking.

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/>



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Reception – Notes and guidance

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.

Numerical - 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.



The Counting 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. 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 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.

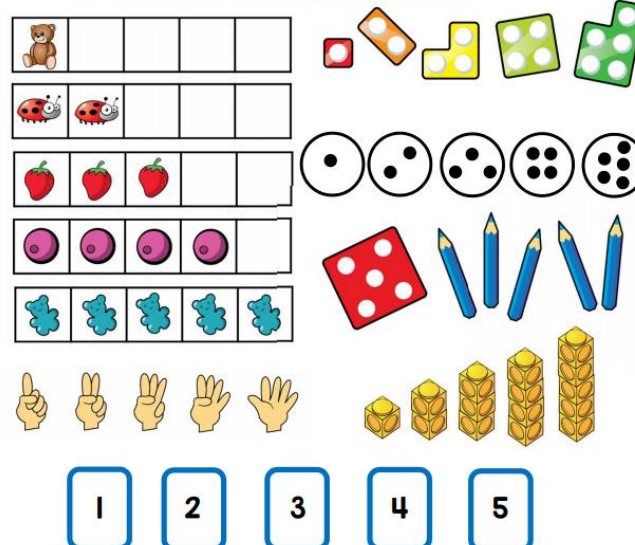
Autumn Term

Week 1	Week 2	Week 3		Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Getting to Know You Opportunities for settling in, introducing the areas of provision and getting to know the children. Key times of day, class routines. Exploring the continuous provision inside and out. Where do things belong? Positional language.			Phase	Just Like Me!			It's Me 1 2 3!			Light and Dark		
			Number	Match and sort Compare amounts			Representing 1, 2 & 3 Comparing 1, 2 & 3 Composition of 1, 2 & 3			Representing numbers to 5. One more and less.		
			Measure, Shape and Spatial Thinking	Compare size, mass & capacity Exploring pattern			Circles and triangles Positional language			Shapes with 4 sides. Time		

Number and Place Value	Numbers to 5	→	One, two, three
		→	Four
		→	Five
Addition and Subtraction	Sorting	→	Sorting into groups
Number and Place Value	Comparing groups	→	Comparing quantities of identical objects
		→	Comparing quantities of non-identical objects
Addition and Subtraction	Change within 5	→	One more
		→	One less
Measurement	Time	→	My day

Reception – Notes and Guidance

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.

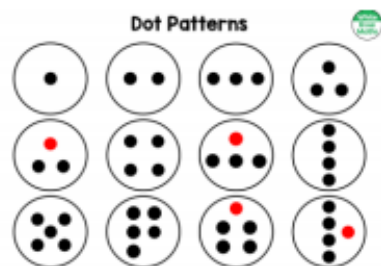
Numerals may be introduced to children but they are not expected to write them at this stage. They could use informal jottings and/or drawing to record their thinking.

Autumn Term Overview

Week	White Rose Block	Main Focus	Key Concepts and Additional Focus	NUMBERBLOCK LINKS
1	Getting to Know You	TEACHER ASSESSMENT & BASELINE GOV NFER ASSESSMENT The assessment consists of: mathematics tasks, early number, early calculation (early addition/subtraction), mathematical language, early understanding of pattern BASELINE/ROUTINE/NUMBERS ALL AROUND US		
2	Getting to Know You			
3	Getting to Know You	Match	Same/different	
4	Just Like Me Just Like Me - Week 1 White Rose Maths	Sort	Same/different, colour, size, shape	Sorting into groups NUMBERBLOCKS SERIES 1 EP 10
5	Just Like Me Just Like Me - Week 2 White Rose Maths	Compare amount	Equal symbol, equal, more than, fewer than	Counting by rote Counting out loud, clapping and counting, stamping, drumming, etc Counting rhymes and songs Using fingers to represent numbers
6	Just Like Me Just Like Me - Week 3 White Rose Maths	Compare size, mass and capacity	large/small, big/little, short/tall, tallest/shortest	
7	Just Like Me	Exploring Pattern	Make simple patterns	Making simple patterns Exploring more complex patterns SERIES 3 EP 8 17
8	It's Me 1, 2, 3! It's Me 1, 2, 3! - Week 1 White Rose Maths	Introduce 1 and 0 Representing 1,2,3 Comparing 1,2,3 BBC iPlayer - Numberblocks - Series 1: Another One	Equal/not equal, circle, 1p	Numberblocks- S1 Episode 1 (One) and NCETM ppt. Numberblocks- S3 Episode 5 (Zero)
9	It's Me 1, 2, 3! It's Me 1, 2, 3! - Week 2 White Rose Maths	Introduce 2 BBC iPlayer - Numberblocks - Series 1: Two Composition of 1,2,3 BBC iPlayer - Numberblocks - Series 5: Twoland	Addition, 2 step pattern, 2p	Numberblocks- S1 Episodes 2 (Another One) and NCETM ppt Numberblocks- S1 Episodes 3 (Two) and NCETM ppt
10	It's Me 1, 2, 3! It's Me 1, 2, 3! - Week 3 White Rose Maths	Introduce 3 BBC iPlayer - Numberblocks - Series 1: Three Circles & Triangles Spatial Awareness BBC iPlayer - Numberblocks - Series 1: One, Two, Three!	3 step pattern, triangles Positional Language	Numberblocks- S1 Episodes 4 (Three) and NCETM ppt Numberblocks- S1 Episodes 5 (One, Two, Three!) and NCETM ppt Numberblocks- S1 Episode 6 (Four) and NCETM ppt Numberblocks- S1 Episode 8 (Three Little Pigs) and NCETM ppt
11	Light and Dark Light and Dark - Week 1 White Rose Maths	Introduce 4 BBC iPlayer - Numberblocks - Series 1: Four BBC iPlayer - Numberblocks - Series 3: Flatland	Squares and rectangles	
12	Light and Dark Light and Dark - Week 2 White Rose Maths	Introduce 5 BBC iPlayer - Numberblocks - Series 1: Five BBC iPlayer - Numberblocks - Series 1: Three Little Pigs BBC iPlayer - Numberblocks - Series 1: Off We Go	Pentagons	Numberblocks- S1 Episodes 9 (Off We Go!) and NCETM ppt
13	Light and Dark	1 more/1 less	Subtraction symbol	One more/One less SERIES 1 EP 13
	Light and Dark - Week 3 White Rose Maths	BBC iPlayer - Numberblocks - Series 1: How to Count BBC iPlayer - Numberblocks - Numbersongs: Five Little Boats		
14	Light & Dark Activity Week White Rose Maths	Comparing Shapes Night & Day/Time	Digging Deeper Measurement	

Spring Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Phase	Alive in 5!			Growing 6, 7, 8			Building 9 & 10		
Number	Introducing zero Comparing numbers to 5 Composition of 4 & 5			6, 7 & 8 Making pairs Combining 2 groups			9 & 10 Comparing numbers to 10 Bonds to 10		
Measure, Shape and Spatial Thinking	Compare Mass (2) Compare Capacity (2)			Length & Height Time			3D-shape Pattern (2)		

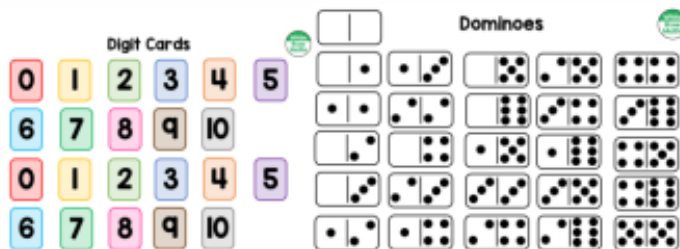
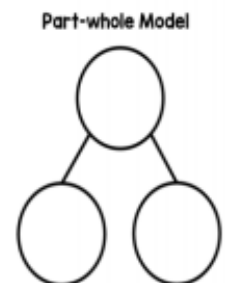


Number of the Day

○

Fewer	The same as	More

Ten Frames





Spring Term Overview

Spring 1	1	Alive in Five	Introducing zero Making pairs Alive in 5! - Week 1 White Rose Maths One less 5 currant buns How many? Representing zero Comparing numbers to 5 Composition of 4 & 5 Equal and unequal BBC iPlayer - Numberblocks - Numbersongs: Five Little Speckled Frogs	Numberblocks series 3, ep 5 zero BBC iPlayer - Numberblocks - Series 3: Zero Numberblocks - The Whole of Me - Once upon a time (ser 3) - Numberblocks Express (ser 3) - Holes Addition/subtraction of 1 Number bonds to 5 Numicon balance Numberblocks-Hide and Seek Addition and subtraction of numbers to 5 Number bonds to 5 BBC iPlayer - Numberblocks - Series 1: The Whole of Me BBC iPlayer - Numberblocks - Series 1: Holes BBC iPlayer - Numberblocks - Series 3: Once Upon a Time
	2	Alive in Five	Composition of numbers to 5- 2 groups How many altogether Composition of numbers to 5- 3 groups How many are hiding? Alive in 5! - Week 2 White Rose Maths BBC iPlayer - Numberblocks - Numbersongs: Hen House Hop	BBC iPlayer - Numberblocks - Series 1: Stampolines BBC iPlayer - Numberblocks - Series 1: The Terrible Twos BBC iPlayer - Numberblocks - Series 1: Hide and Seek BBC iPlayer - Numberblocks - Series 3: The Numberblocks Express
	3	Alive in Five	Comparing mass- heavier/lighter than Compare Capacity- full and empty Measuring capacity How many fit inside? Measuring ingredients Alive in 5! - Week 3 White Rose Maths	There's a hole in my bucket Mary Poppin's bag Who Sank the Boat BBC iPlayer - Numberblocks - Series 3: Fruit Salad
	4	Growing 6,7,8	6 Making pairs Combining 2 group Which show 6, composition of 6 Sorting 6,7,8 (On WR home learning- I do number a week) <i>Composition of 7</i> <i>Composition of 8</i> <i>Matching 6/7/8</i> Growing 6, 7, 8! - Week 1 White Rose Maths	Number of the week=6 Meet Six Counting (1 to 6) Subitising (dice patterns) Six Dinner Sid Numberblocks- Six BBC iPlayer - Numberblocks - Series 2: Six BBC iPlayer - Numberblocks - Series 2: Counting Sheep Double 3 Ladybird spots Hexagon Introduce ten frames Numberblocks- Counting Sheep Exploring equivalent ways to represent 6 Partitioning 6 into equal groups Factors of 6
	5	Growing 6,7,8	7 Making pairs Combining 2 group <i>Composition of 7- from last week</i> Growing 6, 7, 8! - Week 2 White Rose Maths Matching 6/7/8 Making pairs Combining two groups Adding more BBC iPlayer - Numberblocks - Numbersongs: Who Has More?	Number of the week=7 Numberblocks- Seven Meet Seven BBC iPlayer - Numberblocks - Series 2: Seven 7 is one more than 6 Counting (1 to 7) Ways to make 7- can you share it? 7 Days of the week Numberblocks- Fluffies BBC iPlayer - Numberblocks - Series 2: Fluffies Counting (1 to 8) Number bonds within 7 What's the difference- ser 3
	6	Growing 6,7,8	8 Making pairs Combining 2 group BBC iPlayer - Numberblocks - Numbersongs: Scoop A Scoop	Number of the week=8 Numberblocks-Eight Meet Eight BBC iPlayer - Numberblocks - Series 2: Eight Counting (1 to 8) 8 is one more than 7 Subitising (8) Numberblocks- Double Trouble BBC iPlayer - Numberblocks - Series 2: Double Trouble -Octoblock to the rescue ser 3 Doubling (1, 2, 4, 8) and halving Partitioning 8 into equal groups Jasper's Beanstalk- time/height 5 minutes peace
	7	Growing 6,7,8	Length & Height Comparing height- taller/shorter Comparing length- longer/shorter Time- days of the week Measuring height Measuring time Growing 6, 7, 8! - Week 3 White Rose Maths	BBC iPlayer - Numberblocks - Series 2: Just Add One

Spring 2	8	Building 9 and 10	9 Comparing numbers to 9 Bonds to 9 Building 9 & 10 - Week 1 White Rose Maths Representing 9 and 10 Sorting 9 and 10 Ordering numerals to 10 Composition of 9 and 10 Numbers to 10 bingo BBC iPlayer - Numberblocks - Numbersongs: Days of Spring	Number of the week=9 Numberblocks series 2- Nine BBC iPlayer - Numberblocks - Series 2: Nine Meet Nine Counting (1 to 9) The structure of square numbers (4 and 9) Partitioning and combining 9 Numberblocks-The Three Threes BBC iPlayer - Numberblocks - Series 2: The Three Threes -Hiccups (ser 3) BBC iPlayer - Numberblocks - Series 3: Hiccups Partitioning 9 into 3 equal groups Partitioning is the inverse of combining BBC iPlayer - Numberblocks - Series 3: Blockzilla
	9	Building 9 and 10	10 Comparing numbers to 10 Bonds to 10 Building 9 & 10 - Week 2 White Rose Maths Counting back from 10- ten in a bed Comparing numbers within 10 Making 10 BBC iPlayer - Numberblocks - Numbersongs: Zoom Zoom Zoom!	Number of the week=10 10pence Numberblocks series 2- Ten Meet Ten BBC iPlayer - Numberblocks - Series 2: Ten Counting (1 to 10) 10 ones are equivalent to one 10. Numberblocks- Blast Off BBC iPlayer - Numberblocks - Series 2: Blast Off Farmer Pete Numberblocks- Ten Green Bottles BBC iPlayer - Numberblocks - Series 2: Ten Green Bottles -Now we are 6-10 (ser 3) -Numberblobs (ser 3) Subtracting 1 Counting (1 to 10) Counting down 10 to 1 BBC iPlayer - Numberblocks - Series 3: Now We Are Six to Ten
	10	Building 9 and 10	3D shape and pattern Building 9 & 10 - Week 3 White Rose Maths Building with 3d shapes Matching 3d shapes Printing with 3d shapes Pattern Reception - Geometry - Exploring Patterns Making simple patterns Guidance Children copy, continue and create their own simple repeating patterns. They focus on AB and ABC patterns. It is important to provide patterns with at least three full units of repeat. Encourage the children to say the pattern aloud as this helps them to identify the part which repeats and supports them to continue the pattern. The children should be given opportunities to explore patterns in a range of contexts including shapes, colours, sizes, actions and sounds. Encourage them to build patterns both vertically and horizontally. Other Resources Pattern Bugs - Trudy Harris In and Out the Dotty Bluebell circle game Tongue twister patterns - Red Lady yellow lady Clap your hands and wiggle your fingers song Prompts for Learning Whole class demonstrate simple AB action patterns such as: three, clap, arms, clap, arms, clap Pupils tell punch right left right left right Hands up hands down up down up down Say the pattern aloud and encourage the children to join in with you and to suggest new action patterns of their own. Once they are confident with all, extend to ABC eg. tap knees, tap shoulders, tap head knees shoulders head etc. You can also start AB or ABC patterns along a line or around a circle Stand up, stand up, stand up Hands on head hands down hands on head hands down Arms up arms out arms down, arms down Head or sound patterns can be challenging (eg. tapping) and are good for the way you sit at desks in our class. Sounds, actions or phrases can be performed and written down through patterns ABC ABC ABC ABC ABC Create simple patterns with a red dot, green dot, red dot, green dot and red dot, green dot for the children to copy and continue. Challenge them to create their own patterns using the AB or ABC (BBC iPlayer)	Numberblocks-ser 3 Pattern Palace BBC iPlayer - Numberblocks - Series 3: Pattern Palace BBC iPlayer - Numberblocks - Series 3: Building Blocks Reception - Geometry - Exploring Patterns More complex patterns Guidance Children continue to copy, continue and create patterns. They explore patterns which use items, more than once in each repeat for example ABB, AAB, AAB, AAB, AAB, AAB. Again it is important that each pattern you model has at least three full units of repeat. The more units of repeat, the easier it is to identify and continue the pattern. Encourage the children to say each pattern aloud and to create patterns around the edge of shapes as well as in straight lines. Other Resources Duck, Duck, Goose circle game We Will Rock You - Queen (clapping pattern) ABC Pattern Song - Musical Math (YouTube) Prompts for Learning Note: All the prompts in the previous step for creating patterns with actions and sounds can also be applied to more complex patterns. Show the children an AB pattern and a similar ABB pattern and ask them to tell you what they notice. What is the same and what is different? How many more does the ABB pattern have? Repeat with a similar ABB pattern. What is different this time? Ask the children to make their own ABB and ABB patterns using yellow and blue cubes or counters. What other patterns could they make using two colours? Ask the children to describe their patterns. Can their friends continue the patterns they have made? Encourage the children to make patterns using these structures with different objects both indoors and outside.
	11	Building 9 and 10	ASSESSMENT	BBC iPlayer - Numberblocks - Series 3: What's the Difference?
	12	Consolidation	Spring Consolidation - Week 1 White Rose Maths BBC iPlayer - Numberblocks - Numbersongs: How Many Passengers?	Hopscotch numeral recognition Snap with numeral and picture cards Ten frame fill game BBC iPlayer - Numberblocks - Series 3: Ten Again Bean bag throw game- composition of 6
	13	Consolidation	Spring Consolidation - Week 2 White Rose Maths BBC iPlayer - Numberblocks - Numbersongs: Lets All Draw Numbers	Who has more comparison game Combining two groups BBC iPlayer - Numberblocks - Series 3: Peekaboo! Treasure hunt to 10 BBC iPlayer - Numberblocks - Series 5: What's My Number? Composition of 8 BBC iPlayer - Numberblocks - Series 3: Octoblock to the Rescue! Composition of 7
	14	Consolidation	Spring Consolidation - Week 3 White Rose Maths	Trellis track game BBC iPlayer - Numberblocks - Series 3: Five and Friends Composition of 10 BBC iPlayer - Numberblocks - Series 2: Numberblock Castle Composition of 9 What do you notice? Estimation BBC iPlayer - Numberblocks - Series 3: The Legend of Big Tum

Summer Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Phase	To 20 and Beyond			First Then Now			Find my Pattern			On the Move		
Number	Building Numbers Beyond 10 Counting Patterns Beyond 10			Adding More Taking Away			Doubling Sharing & Grouping Even and Odd			Deepening Understanding Patterns and Relationships		
Spatial Reasoning	Spatial Reasoning (1) Match, Rotate, Manipulate			Spatial Reasoning (2) Compose and Decompose			Spatial Reasoning (3) Visualise and Build			Spatial Reasoning (4) Mapping		

PHASE 7,8,9,10

Part-whole Model

Number of the day

One Less	One More

Digit Cards

11	12	13	14	15
16	17	18	19	20

Number tracks

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

First Then Now

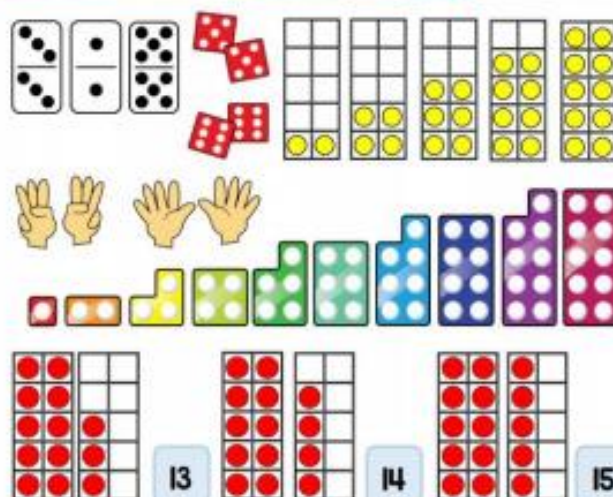
Pattern maps





Reception - Notes and guidance

Key Representations



13 14 15

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.

Summer Term Overview

SUMMER 1	1	TO 20 AND BEYOND	To 20 & Beyond - Week 1 White Rose Maths Number patterns to 20 Matching pictures and numerals Ten frame fill beyond 10 Estimating game Subtraction from ten frames game	BBC iPlayer - Numberblocks - Series 3: Numberblock Rally BBC iPlayer - Numberblocks - Series 3: Eleven BBC iPlayer - Numberblocks - Series 3: Twelve BBC iPlayer - Numberblocks - Series 3: The Way of the Rectangle BBC iPlayer - Numberblocks - Series 3: Ride the Rays
	2	TO 20 AND BEYOND	To 20 & Beyond - Week 2 White Rose Maths Missing numbers Ordering numbers to 20 Race to 20 game Bingo with numbers to 20 Which holds the most? BBC iPlayer - Numberblocks - Series 5: Ten Vaulting	BBC iPlayer - Numberblocks - Series 3: Block Star BBC iPlayer - Numberblocks - Series 3: Thirteen BBC iPlayer - Numberblocks - Series 3: Fourteen BBC iPlayer - Numberblocks - Series 3: Fifteen
	3	TO 20 AND BEYOND	To 20 & Beyond - Week 3 White Rose Maths Find my match with shapes Find my match with models Match and fill Replicate my model Tangrams	BBC iPlayer - Numberblocks - Series 3: Tween Scenes BBC iPlayer - Numberblocks - Series 3: Step Squads BBC iPlayer - Numberblocks - Series 4: Fifteens Minute of Fame BBC iPlayer - Numberblocks - Series 4: On Your Head
	4	FIRST THEN NOW	First Then Now - Week 1 White Rose Maths Track game- counting on Adding more Adding more- unknown then Adding more- first unknown	BBC iPlayer - Numberblocks - Series 4: Tens Place BBC iPlayer - Numberblocks - Series 4: Balancing Bridge BBC iPlayer - Numberblocks - Series 4: Sixteen BBC iPlayer - Numberblocks - Series 4: Square Club BBC iPlayer - Numberblocks - Series 4: Seventeen
	5	FIRST THEN NOW	First Then Now - Week 2 White Rose Maths Taking away with pebbles Taking away Taking away- unknown then Pass it on game	BBC iPlayer - Numberblocks - Series 4: Eighteen BBC iPlayer - Numberblocks - Series 4: Loop the Loop BBC iPlayer - Numberblocks - Series 4: Nineteen BBC iPlayer - Numberblocks - Series 4: Twenty
	6	FIRST THEN NOW	First Then Now - Week 3 White Rose Maths Making new shapes with 2 right angle triangles Making new shapes with squares Grandpa's quilt https://youtu.be/qX11_6esT2M Making new shapes with tangrams Pattern blocks	BBC iPlayer - Numberblocks - Series 4: Tall Stories BBC iPlayer - Numberblocks - Series 4: Flights of Fancy BBC iPlayer - Numberblocks - Series 4: I Can Count to Twenty
	7	FIND MY PATTERN	Find My Pattern - Week 1 White Rose Maths Doubling Doubling Dice Game Doubling barrier Game Domino game  BBC iPlayer - Numberblocks - Series 5: Your Turn	Doubling Guidance 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 are also a fun way for children to 'double' the quantities they build. 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. Other Resources Double Trouble - Nick This is the Story of Alison Hubble by Allan Ahlberg BBC Numberblocks Series 2 Episode 9 - Double Trouble Prompts for Learning Allow the children to explore different ways to build doubles using real objects and practical equipment. Provide sets of dominoes and ask the children to find the doubles. Show the children how to play dominoes and ask the children to make as they play. Play Doubles The children take turns to roll 2 dice and score a point each time they roll a double. The first to reach 3 points wins the game. Ask the children to sit opposite each other. One child sets out a quantity of small items such as pebbles or nuts. Their partner doubles it by making the same quantity. They can also hold up fingers and their partner matches them to make a double. BBC iPlayer - Numberblocks - Series 3: Mirror, Mirror BBC iPlayer - Numberblocks - Numbersongs: Counting Cars BBC iPlayer - Numberblocks - Series 4: Heist

SUMM2	8	FIND MY PATTERN	Find My Pattern - Week 2 White Rose Maths Sharing Teddy Bear Picnic The Doorbell Rang Grouping https://youtu.be/DMD_7WThR3g https://www.youtube.com/watch?v=gNTSBmbv NLE Reception - Multiplication and Division - Numerical Patterns Halving and Sharing Snack Ask the children to come for snack in pairs and provide quantities of food that they need to share with their partner. A box of biscuits, a bunch of grapes, a handful of popcorn. Progress from halving to sharing equally between 3 or 4 children. Various areas Provide opportunities for the children to share quantities in groups. For example sharing out the cards on dominoes at the start of a game, sharing out the biscuits or buns, sharing the small world animals into 2 lots. Setting Have some pictures ready to show the children. Some will show equal groups and some will show unequal groups. Ask the children to discuss and sort the pictures. The children might also like to make their own examples of equal and unequal groups to sort. Teddy bear picnic Provide 2 teddy bears, 2 plates and small equal quantities of food items to represent different food items. Ask the children to share out the food items. Say to the children: 'Teddy gets the same. What will happen if another teddy joins the picnic?' Guidance The children will have quantities by sharing items into 2 equal groups. The children will probably already have some experience of sharing and will be quick to point out when groups are not shared fairly. The distinction between fair and unfair sharing can be used to emphasise the idea of half as being one of 2 equal parts. Once children can confidently halve small quantities, they can explore sharing between 3 or 4 people. They will notice that sometimes there are items left over and may come up with their own suggestions for how to resolve this. Other Resources The Doorbell Rang - Pat Hutchins Bean Thumpin' - Matthew McElligott Maths Story Time - Nick Prompts for Learning Show the children a box of 10 biscuits. Explain that you are going to share them into 2 equal groups so there will be half for you and half for your friend. Put a handful straight into each plate without counting - make sure that one plate has much more biscuits than the other. Ask the children if that is fair. Prompt them to show you how to share the biscuits fairly. With groups of children response why some start by putting the biscuits into 2 obviously unequal groups so that it takes much longer for one team to finish than the other. Ask the children why the smaller team began winning. Is that fair? Ask the children to create 2 equal groups so they are fair. Provide opportunities for the children to share items into equal groups. For example, at snack time they could share bowls of grapes fairly between 3 or 4 children. They could share out the cards on dominoes before playing a game. Prompt the children to notice that sometimes they can make equal groups and sometimes they have items left over.	Reception - Multiplication and Division - Numerical Patterns Halving and Sharing Guidance The children will have quantities by sharing items into 2 equal groups. The children will probably already have some experience of sharing and will be quick to point out when groups are not shared fairly. The distinction between fair and unfair sharing can be used to emphasise the idea of half as being one of 2 equal parts. Once children can confidently halve small quantities, they can explore sharing between 3 or 4 people. They will notice that sometimes there are items left over and may come up with their own suggestions for how to resolve this. Other Resources The Doorbell Rang - Pat Hutchins Bean Thumpin' - Matthew McElligott Maths Story Time - Nick Prompts for Learning Show the children a box of 10 biscuits. Explain that you are going to share them into 2 equal groups so there will be half for you and half for your friend. Put a handful straight into each plate without counting - make sure that one plate has much more biscuits than the other. Ask the children if that is fair. Prompt them to show you how to share the biscuits fairly. With groups of children response why some start by putting the biscuits into 2 obviously unequal groups so that it takes much longer for one team to finish than the other. Ask the children why the smaller team began winning. Is that fair? Ask the children to create 2 equal groups so they are fair. Provide opportunities for the children to share items into equal groups. For example, at snack time they could share bowls of grapes fairly between 3 or 4 children. They could share out the cards on dominoes before playing a game. Prompt the children to notice that sometimes they can make equal groups and sometimes they have items left over. BBC iPlayer - Numberblocks - Series 4: Sign of the Times BBC iPlayer - Numberblocks - Series 4: Fun Times Fair BBC iPlayer - Numberblocks - Series 4: The Lair of Shares BBC iPlayer - Numberblocks - Series 4: Terrible Twosday
	9	FIND MY PATTERN	Find My Pattern - Week 3 White Rose Maths Even and Odd One Odd day How many cubes Barrier Game One Odd Day - YouTube Reception - Multiplication and Division - Numerical Patterns Digging Deeper Odd and even Ask all the children to collect an odd number of cubes. Ask them to check each other's and compare the different quantities. Ask all the children: 'How could you check?' How will the children collect one more cube and add it to their set. How many do you have now? Do you still have an odd number of cubes? Ask the children to continue adding one more cube and to discuss what they notice. What is the largest odd number you can find? How can you check that it is odd? Find half Provide 2 teddy bears and a selection of items for sharing. Ask the children to explore which quantities will halve exactly into 2 equal groups and which will have one left over. If you have 5 items you get both halves the same? What about 7 items? Start with 10? Is this an even number or an odd number? How do you know? Encourage the children to draw pictures to record their findings. Make equal groups This time keep 10 items to share each one but vary the number of teddy bears and plates. Ask the children to explain during the 10 items into equal groups so that each teddy gets the same. If there are 2 teddy bears will they each get the same? How many are in each group? Are there any items left over? What about 3 teddy bears? 4 teddy bears? 5 teddy bears? Guidance The children begin to understand that quantities which can be shared into 2 equal groups with no items left over are even. Those which have one left over when they are shared into 2 equal groups are odd. Encourage the children to notice this structure on the number shapes and by building pair-wise patterns on the 10 frames. They can also explore odd and even by grouping quantities into pairs. Even quantities can be grouped into pairs and odd quantities will have one left on their own when they are grouped into pairs. Other Resources Six Dinner Sid - Jaga Moore Numberblocks Series 2 Episode 19 Odds and Evens Prompts for Learning Encourage the children to investigate whether small quantities are odd or even by sharing into 2 groups or by making pairs. Prompt them to recognise that some numbers can be halved or grouped into pairs and some numbers will have one left over. Ask the children to build pair-wise patterns on the 10 frames and ask them to place which have two equal groups (even numbers) and those which cannot be split into two equal groups (odd numbers). Make links to the earlier work on dominoes and labels which 10 frame patterns show doubles and halves and which do not? The number shapes have a similar structure which can be used to odd and even in a similar way. Encourage children to use the shape in order to allow children to see the odd/even pattern as they count up.	Odds and Evens Guidance The children begin to understand that quantities which can be shared into 2 equal groups with no items left over are even. Those which have one left over when they are shared into 2 equal groups are odd. Encourage the children to notice this structure on the number shapes and by building pair-wise patterns on the 10 frames. They can also explore odd and even by grouping quantities into pairs. Even quantities can be grouped into pairs and odd quantities will have one left on their own when they are grouped into pairs. Other Resources Six Dinner Sid - Jaga Moore Numberblocks Series 2 Episode 19 Odds and Evens Prompts for Learning Encourage the children to investigate whether small quantities are odd or even by sharing into 2 groups or by making pairs. Prompt them to recognise that some numbers can be halved or grouped into pairs and some numbers will have one left over. Ask the children to build pair-wise patterns on the 10 frames and ask them to place which have two equal groups (even numbers) and those which cannot be split into two equal groups (odd numbers). Make links to the earlier work on dominoes and labels which 10 frame patterns show doubles and halves and which do not? The number shapes have a similar structure which can be used to odd and even in a similar way. Encourage children to use the shape in order to allow children to see the odd/even pattern as they count up. BBC iPlayer - Numberblocks - Series 2: Odds and Evens BBC iPlayer - Numberblocks - Series 3: The Wrong Number BBC iPlayer - Numberblocks - Series 2: The Two Tree BBC iPlayer - Numberblocks - Series 4: Divide and Drive
	10	ON THE MOVE	Not released yet	BBC iPlayer - Numberblocks - Series 4: Twenty One and On
				BBC iPlayer - Numberblocks - Series 4: We're Going on a Square Hunt BBC iPlayer - Numberblocks - Series 4: Thirtys Big Top BBC iPlayer - Numberblocks - Series 4: Land of the Giants
	11	ONE THE MOVE		
	12	ON THE MOVE		

Numberblock Extension episodes:

Using number bonds to 10 to make 20- [BBC iPlayer - Numberblocks - Series 5: The Many Friends of Twenty](#)

[BBC iPlayer - Numberblocks - Series 4: One Thousand and One](#)

[BBC iPlayer - Numberblocks - Series 4: More to Explore](#)

[BBC iPlayer - Numberblocks - Series 4: Fifty](#)

[BBC iPlayer - Numberblocks - Series 4: Sixtys High Score](#)

[BBC iPlayer - Numberblocks - Series 4: The Big One](#)

[BBC iPlayer - Numberblocks - Series 4: One Hundred](#)

SERIES 5

Multiplication x2- [BBC iPlayer - Numberblocks - Series 5: Two Times Shoe Shop](#)

Arrays- [BBC iPlayer - Numberblocks - Series 5: Rectangle Racers](#)