Long term maths plan 2022-2023 Walverden Primary School

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Number ELG	**Numerical patterns ELG**
Children at the expected level of development will: Have a deep understanding of number to 10, including the composition of each number - Subitise (recognise quantities without counting) up to 5 - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	Children at the expected level of development will: - Verbally count beyond 20, recognising the pattern of the counting system - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Considerations for planning

- Although Shape, Space and Measure has been removed from the ELG's, planning should ensure that 'the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures'.
- Throughout mathematical planning, subitising needs to be embedded from the very early experiences of number. Consider the resources that we have available such as dice, dot cards, tens frames and regular and irregular representations of number.
- Children need regular opportunities to practice automatic recall of number bonds to 5 and 10 and also double facts.
- Consider the resources available that will support the greater emphasis on comparing quantities, such as five and tens frames, concrete objects and regular and irregular representations of number.
- Consideration will also need to be given to how children can develop their understanding of numerical patterns, for example odd and even numbers and double facts.

Reception Guidance

This year education and Early Years provision has changed dramatically. Many young children will have missed out on almost a year in nursery in high quality provision as well as not being able to attend home based settings or pre-schools and playgroups.

Here at WRM we full understand the need for high quality environments and meaningful interactions with staff and each other. Our EY ethos is embedded in the Characteristics of Effective Learning and seeks to support young children's development. We also understand what it is like to teach, lead and manage in Early Years and how to support children to progress through play.

Our adapted overviews support the ethos of the EYFS whilst at the same time enabling teachers to create a mathematically rich curriculum.

The updated Reception Scheme underpins the new Educational Programme for Mathematics (DFE July 2020) and will support you to deliver a curriculum that embeds mathematical thinking and talk. The updated scheme builds on the content of the previous scheme and allows for key mathematical concepts to be revisited and developed further across the year.

The new scheme has been divided into 3-weekly phases which provide far more opportunities to develop the understanding of shape, measure and spatial thinking.

The scheme does not focus solely on either the existing or the new ELGs but the skills needed for either set will be included as part of a broad early maths curriculum.

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.

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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Overview 2020/21

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

- 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.

EYFS Autumn 2020/21

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

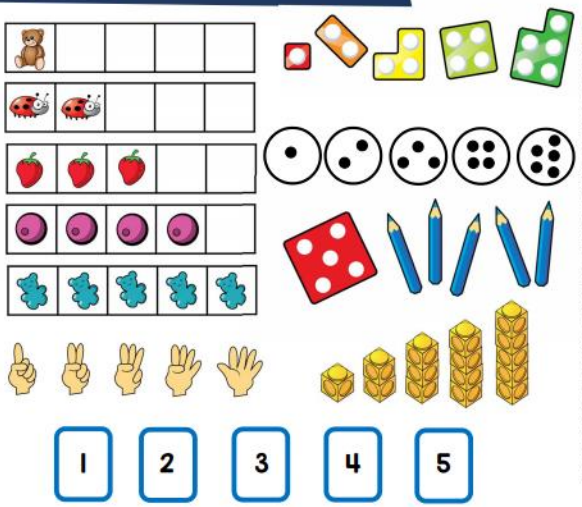
Reception - Notes and guidance

Autumn Progression

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.

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Autumn Term				
Week	**White Rose Block**	**Main focus**	**Key concepts and additional focus**	**Numberblocks links**
	Getting to know you	Teacher assessment and baseline Gov NFER baseline The assessment consists of: mathematical tasks, early number, early calculation (early addition and subtraction), mathematical language, early understanding of pattern.		
	Getting to know you			
	Getting to know you	Match	Same/different	

	Just like me	Sort https://whiterosemaths.com/homelearning/early-years/week-1/	Same/different, colour, size, shape Sorting into groups	Numberblocks series 1 ep10 https://www.bbc.co.uk/iplayer/episode/b08cr24d/numberblocks-series-1-how-to-count?seriesId=b08bzg8q
	Just like me	Compare amounts https://whiterosemaths.com/homelearning/early-years/week-2/	Equal, symbol, equal, more then, fewer than Counting by rote Counting out loud, clapping and counting, stamping, drumming etc Counting rhymes and songs Using fingers to represent numbers	
	Just like me	Compare size, mass and capacity https://whiterosemaths.com/homelearning/early-years/week-3/	Large/small Big/little Short/tall Tallest/shortest	
	Just like me	Exploring pattern	Make simple patterns Exploring more complex patterns	https://www.bbc.co.uk/iplayer/episode/b0bmkj57/numberblocks-series-3-building-blocks?seriesId=b0bls7vy
	It's me 1.2.3!	Introduce 1 and 0 Representing 1,2,3 Comparing 1,2,3 https://whiterosemaths.com/homelearning/early-years/its-me-1-2-3-week-1/	Equal/not equal Circle 1p	Numberblocks-s1 episode 1 (one) and NCETM ppt. https://www.bbc.co.uk/iplayer/episode/b08bzzns/numberblocks-series-1-one

	It's me 1.2.3!	Introduce 2 Composition of 1,2,3 https://whiterosemaths.com/homelearning/early-years/its-me-1-2-3-week-2/	Addition 2 step pattern 2p	Number blocks- s1 Episodes 2 (another one) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08c001f/numberblocks-series-1-another-one Numberblocks- s1 episodes 3 (two) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08bzgt8/numberblocks-series-1-two https://www.bbc.co.uk/iplayer/episode/m000t8kn/numberblocks-series-5-twoland Numberblocks- s1 episodes 4 (three) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08bzgxx/numberblocks-series-1-three Numberblocks- s1 episode 5 (one, two, three!) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08bzh11/numberblocks-series-1-one-two-three Numberblocks- s1 episode 6 (four) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08d61cv/numberblocks-series-1-four?seriesId=m000t16j https://www.bbc.co.uk/iplayer/episode/b0bp2qlb/numberblocks-series-3-flatland
	It's me 1.2.3!	Introduce 3 Circles and triangle Spatial awareness https://whiterosemaths.com/homelearning/early-years/its-me-1-2-3-week-3/	3 step pattern Triangles Positional language	
	Light and dark	Introduce 4 https://whiterosemaths.com/homelearning/early-years/light-and-dark-week-1/	Square and rectangles	
	Light and dark	Introduce 5 Representing numbers to 5 https://whiterosemaths.com/homelearning/early-years/light-and-dark-week-2/	Pentagons	Numberblocks- number 5 https://www.bbc.co.uk/iplayer/episode/b08d630h/numberblocks-series-1-five Numberblocks- s1 episodes 8 (3 little pigs) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08cqtk0/numberblocks-series-1-three-little-pigs Numberblocks s1 episode 9 (off we go!) and NCETM ppt https://www.bbc.co.uk/iplayer/episode/b08cr0y7/numberblocks-series-1-off-we-go

	Light and dark	1 more/1 less https://www.bbc.co.uk/iplayer/episode/p0779pkp/numberblocks-numbersongs-five-little-boats?seriesId=b08bzg8q https://whiterosemaths.com/homelearning/early-years/light-and-dark-week-3/	Subtraction symbol One more/one less	Series 1 Ep13 https://www.bbc.co.uk/iplayer/episode/b08cr24d/numberblocks-series-1-how-to-count
	Light and dark	Comparing shapes Night &day/time https://whiterosemaths.com/homelearning/early-years/light-and-dark-week-4/	Digging deeper Measurement	

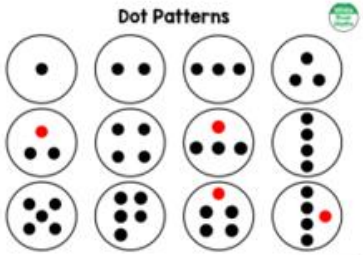
SPRING TERM

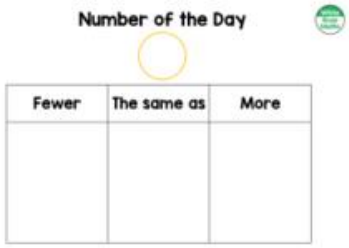
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Phase	Alive in 5!			Growing 6, 7, 8			Building 9 & 10		
Number	Introducing Zero Comparing Numbers to 5 Composition of 4 & 5			6, 7 & 8 Making Pairs Combining 2 Groups			9 & 10 Comparing Numbers to 10 Bonds to 10		
Measure, Shape and Spatial Thinking	Compare Mass (2) Compare Capacity (2)			Length & Height Time			3d-Shape Pattern (2)		

Reception - Notes and guidance

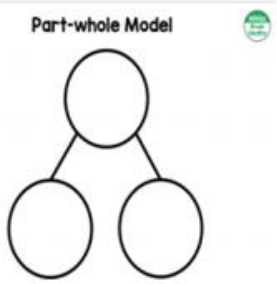
Spring Progression

Addition and Subtraction	Numbers to 5	→ Introducing zero → Number bonds to 5
Number and Place Value	Numbers to 10	→ Counting to 6, 7 and 8 → Counting to 9 and 10 → Comparing groups up to 10
Addition and Subtraction	Addition to 10	→ Combining two groups to find the whole → Number bonds to 10 – ten frame → Number bonds to 10 – part-whole model
Geometry	Shape and space	→ Spatial awareness → 3-D shapes → 2-D shapes

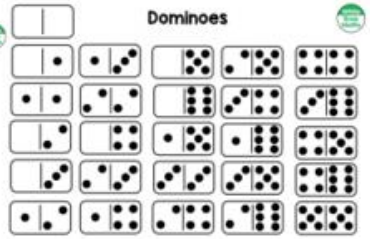












SPRING TERM				
Week	**White Rose Block**	**Main focus**	**Key concepts and possible additional focus**	**Numberblocks links**
	Alive in five https://whiterosemaths.com/homelearning/early-years/alive-in-5-week-1/	Introduce zero How many? Representing zero Comparing numbers to 5 Composition of 4 & 5 Equal and unequal https://www.bbc.co.uk/iplayer/episode/p07795jn/numberblocks-numbersongs-five-little-speckled-frogs	One less 5 Currant buns Addition/subtraction of 1 Number bonds to 5 Numicon balance Addition and subtraction of numbers to 5 Number bonds to 5	Series 3- ep 5 zero https://www.bbc.co.uk/iplayer/episode/b0blsx34/numberblocks-series-3-zero?seriesId=b08bzg8q Number blocks The whole of me https://www.bbc.co.uk/iplayer/episode/b08dr1l3/numberblocks-series-1-the-whole-of-me?seriesId=m0005y7k Numberblocks- holes https://www.bbc.co.uk/iplayer/episode/b08dmjsk/numberblocks-series-1-holes?seriesId=b0bls7vy Once upon a time https://www.bbc.co.uk/iplayer/episode/b0bls8yj/numberblocks-series-3-once-upon-a-time
	Alive in five https://whiterosemaths.com/homelearning/early-years/alive-in-5-week-2/	Composition of numbers to 5- 2 groups How many altogether Composition of numbers to 5- 3 groups How many are hiding https://www.bbc.co.uk/iplayer/episode/p077rkj2/numberblocks-numbersongs-hen-house-hop		Numberblocks- stampolines https://www.bbc.co.uk/iplayer/episode/b08dnngm/numberblocks-series-1-stampolines Numberblocks- the terrible twos https://www.bbc.co.uk/iplayer/episode/b08dmhm6/numberblocks-series-1-the-terrible-twos Numberblocks- hide and seek https://www.bbc.co.uk/iplayer/episode/b08dmn88/numberblocks-series-1-hide-and-seek?seriesId=m0005y7k Numberblocks- express https://www.bbc.co.uk/iplayer/episode/b0blss0t/numberblocks-series-3-the-numberblocks-express?seriesId=m000t16j
	Alive in five https://whiterosemaths.com/homelearning/early-years/alive-in-5-week-3/	Comparing mass- heavier/lighter than Compare capacity- full and empty Measuring capacity How many fit inside? Measuring ingredients	There's a hole in my bucket Mary Poppin's bag Who sank the boat	Numberblocks- fruit salad https://www.bbc.co.uk/iplayer/episode/b0blsv9r/numberblocks-series-3-fruit-salad?seriesId=m0005y7k

	Growing 6,7,8 https://whiterosemaths.com/homelearning/early-years/growing-6-7-8/	6 making pairs Comparing 2 groups Which show 6 Composition of 6 Matching pairs	Meet 6 Counting 1-6 Subitising (dice patterns) Six Dinner Six Double 3 Ladybird spots Hexagon Introduce tens frames Exploring equivalent ways to represent to 6 Portioning 6 into equal groups Factors of 6	Number of the week-6 Number blocks- six https://www.bbc.co.uk/iplayer/episode/b08pgksd/numberblocks-series-2-six?seriesId=b08bzg8q Numberblocks- counting sheep https://www.bbc.co.uk/iplayer/episode/b08q4g7y/numberblocks-series-2-counting-sheep?seriesId=b08bzg8q
	Growing 6,7,8 https://whiterosemaths.com/homelearning/early-years/growing-6-7-8-week-2/	7 Combining 2 groups Composition of 7 Matching 6/7/8 Combing two groups Sorting 6,7,8 Matching 6/7/8 https://www.bbc.co.uk/iplayer/episode/p07798v4/numberblocks-numbersongs-who-has-more	7 is one more than 6 Counting 1-7 Ways to make 7- can you share it? 7 days a week Counting 1-8 Number bonds within	Number of the week 7 Numberblocks seven Meet seven https://www.bbc.co.uk/iplayer/episode/b08pgqt4/numberblocks-series-2-seven?seriesId=m000t16j Numberblocks- fluffies https://www.bbc.co.uk/iplayer/episode/b08r3p2x/numberblocks-series-2-fluffies?seriesId=m0005y7k What's the difference- series 3
	Growing 6,7,8 https://whiterosemaths.com/homelearning/early-years/growing-6-7-8-week-3/	8 making pairs Combining 2 groups Composition of 8 Adding more https://www.bbc.co.uk/iplayer/episode/p07798gg/numberblocks-numbersongs-scoop-a-scoop	Counting 1-8 8 is one more than 7 Subitising 8 Doubling (1,2,4,8) and halving Portioning 8 into equal groups	Number of the week 8 Numberblocks eight- meet eight https://www.bbc.co.uk/iplayer/episode/b08pgvmb/numberblocks-series-2-eight?seriesId=b08bzg8q Numberblocks- double trouble https://www.bbc.co.uk/iplayer/episode/b08q4jkq/numberblocks-series-2-double-trouble Octoblock to the rescue series 3 https://www.bbc.co.uk/iplayer/episode/b0bn5hgn/numberblocks-series-3-octoblock-to-the-rescue?seriesId=b08bzg8q

	Growing 6,7,8	Length and height Comaring height- taller/shorter Comparing length- longer/shorter Time- days of the week Measuring height Measuring time	Jasper's beanstalk- time/height 5 minutes peace	Number blocks- just add one https://www.bbc.co.uk/iplayer/episode/b08q39b4/numberblocks-series-2-just-add-one
	Building 9 and 10 https://whiterosemaths.com/homelearning/early-years/building-9-10-week-1/	9 Comparing numbers to 9 Bonds to 9 Representing 9 and 10 Sorting 9 and 10 Ordering numerals to 10 Composition of 9 and 10 Numbers to 10 bingo https://www.bbc.co.uk/iplayer/episode/p0779pxy/numberblocks-numbersongs-days-of-spring	The structure of square numbers (4 and 9) Portioning and combining 9 Portioning 9 into 3 equal groups Portioning is the inverse of combining	Number of the week -9 Numberblocks series 2 -nine https://www.bbc.co.uk/iplayer/episode/b08phbzc/numberblocks-series-2-nine?seriesId=b0bls7vy Number blocks- the three threes https://www.bbc.co.uk/iplayer/episode/b08q4mkf/numberblocks-series-2-the-three-threes Hiccups series 3 https://www.bbc.co.uk/iplayer/episode/b0bmkmb3/numberblocks-series-3-hiccups Numberblocks- blockzilla https://www.bbc.co.uk/iplayer/episode/b0blsqtz/numberblocks-series-3-blockzilla?seriesId=b0bl5v3r
	Building 9 and 10 https://whiterosemaths.com/homelearning/early-years/building-9-10-week-2/	10 comparing numbers to 10 Bonds to 10 Counting back from 10- ten in a bed Comparing numbers within 10 Making 10 https://www.bbc.co.uk/iplayer/episode/p0779868/numberblocks-numbersongs-zoom-zoom-zoom	Meet ten Counting 1-10 10 ones are equivalent to one 10 Now we are 6-10 series 3 Subtracting 1 Counting 1-10 Counting down 10-1 Farmer Pete	Number of the week 10 10p numberblocks series 2- ten https://www.bbc.co.uk/iplayer/episode/b08phr1g/numberblocks-series-2-ten?seriesId=b08bzg8q Number blocks blast off https://www.bbc.co.uk/iplayer/episode/b08q3zx7/numberblocks-series-2-blast-off?seriesId=b0bls7vy Numberblocks ten green bottles https://www.bbc.co.uk/iplayer/episode/b08r41qb/numberblocks-series-2-ten-green-bottles Numberblocks-now we are 6 https://www.bbc.co.uk/iplayer/episode/b0bmkb6k/numberblocks-series-3-now-we-are-six-to-ten?seriesId=m000t16j

	Building 9 and 10 https://whiterosemaths.com/homelearning/early-years/building-9-10-week-3/	3D shape and pattern Building with 3D shapes Matching 3D shapes Printing with 3D shapes Pattern		Numberblocks series 3 pattern palace https://www.bbc.co.uk/iplayer/episode/b0bp2t8d/numberblocks-series-3-pattern-palace?seriesId=b0bl5v3r Numberblocks- building blocks https://www.bbc.co.uk/iplayer/episode/b0bmkj57/numberblocks-series-3-building-blocks
	Building 9 and 10	Assessment	What's the difference	Numberblocks- what's the difference https://www.bbc.co.uk/iplayer/episode/b0bn57fv/numberblocks-series-3-whats-the-difference?seriesId=b08bzg8q
	Consolidation	https://whiterosemaths.com/homelearning/early-years/spring-consolidation-week-1/ https://www.bbc.co.uk/iplayer/episode/p077rhkv/numberblocks-numbersongs-how-many-passengers?seriesId=b0bls7vy	Hopscotch numeral recognition Snap with numeral and picture cards Ten frame fill game Bean bag throw game	Numberblocks- ten again https://www.bbc.co.uk/iplayer/episode/b0bn5k6h/numberblocks-series-3-ten-again?seriesId=b0bl5v3r
	Consolidation	https://whiterosemaths.com/homelearning/early-years/spring-consolidation-week-2/ https://www.bbc.co.uk/iplayer/episode/p077rk5n/numberblocks-numbersongs-lets-all-draw-numbers	Who has more comparison game Combining 2 groups Treasure hunt to 10 Composition of 8 Composition of 7	Numberblocks-peekaboo https://www.bbc.co.uk/iplayer/episode/b0bmkk2p/numberblocks-series-3-peekaboo?seriesId=m0005y7k Octoblock to the rescue series 3 https://www.bbc.co.uk/iplayer/episode/b0bn5hgn/numberblocks-series-3-octoblock-to-the-rescue?seriesId=b08bzg8q Numberblocks- what's my number https://www.bbc.co.uk/iplayer/episode/m000t2pb/numberblocks-series-5-whats-my-number?seriesId=b08bzg8q
	Consolidation	https://whiterosemaths.com/homelearning/early-years/spring-consolidation-week-3/	Trellis track game Composition of 9 Composition of 10 What do you notice?	Numberblocks- five and friends https://www.bbc.co.uk/iplayer/episode/b0bn5dz7/numberblocks-series-3-five-and-friends Numberblocks- the legend of the big turn https://www.bbc.co.uk/iplayer/episode/b0bp2v6x/numberblocks-series-3-the-legend-of-big-tum

			estimation	Numberblocks- castle https://www.bbc.co.uk/iplayer/episode/b08r3xqq/numberblocks-series-2-numberblock-castle

Summer 2020/21

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
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		

Reception - Notes and guidance

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Summer Progression

Geometry	Exploring patterns	→ Making simple patterns → Exploring more complex patterns
Addition and Subtraction	Change	→ Adding more → Taking away
Number and Place Value	Numbers to 20	→ Counting to 20
Multiplication and Division	Numerical patterns	→ Doubling → Halving and sharing → Odds and evens
Measurement	Measure	→ Length, height and distance → Weight → Capacity

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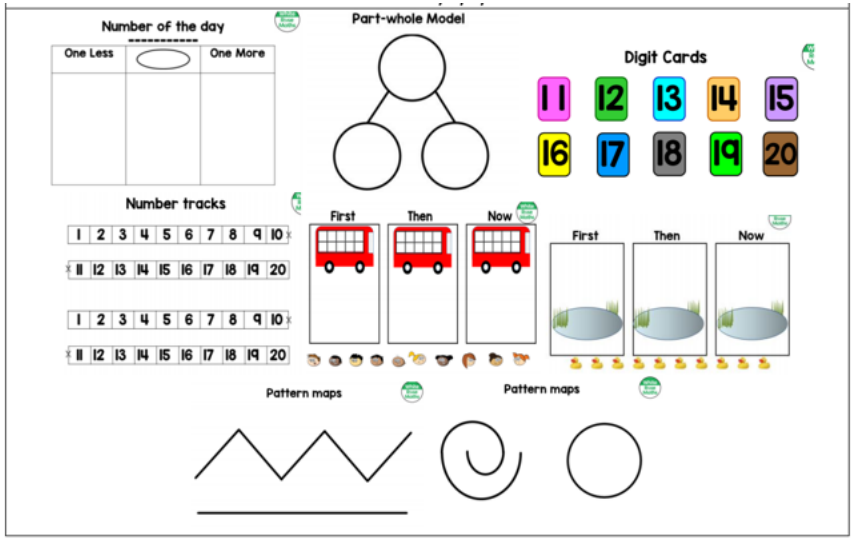
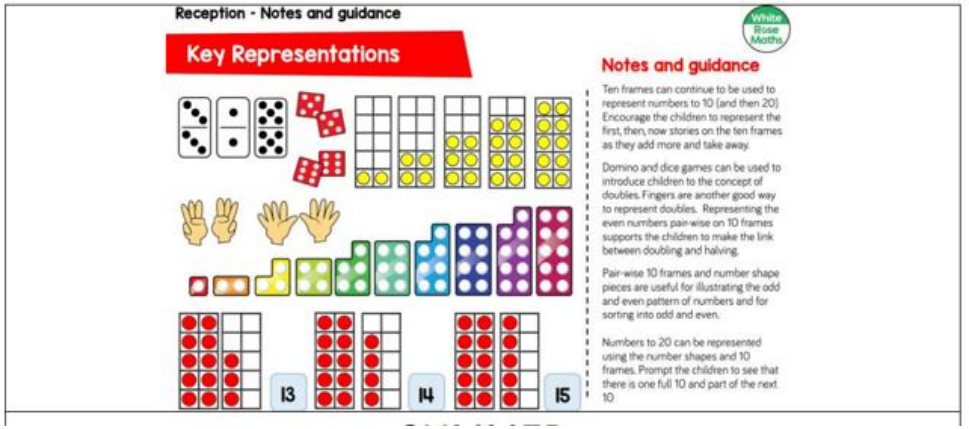

Number of the day
One Less
One More
Part-whole Model
Digit Cards
11 12 13 14 15
16 17 18 19 20
Number tracks
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
First
Then
Now
Pattern maps
Pattern maps


Reception - Notes and guidance
Key Representations
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
13
14
15

SUMMER NOTE- To 20 and beyond and find my pattern have swapped due to the children needing to have covered the areas in find my pattern before summer 2.				
Week	**White Rose Block**	**Main focus**	**Key concepts and additional focus**	**Numberblocks links**
	Find my pattern	Doubling https://www.bbc.co.uk/iplayer/episode/p077rl69/numberblocks-numbersongs-counting-cars?seriesId=m000t16j https://whiterosemaths.com/homelearning/early-years/find-my-pattern-week-1/	Doubling dice game Doubling barrier game Domino game	Numberblocks- mirror mirror https://www.bbc.co.uk/iplayer/episode/b0bp2xdl/numberblocks-series-3-mirror-mirror Numberblocks-heist https://www.bbc.co.uk/iplayer/episode/m0006s63/numberblocks-series-4-heist Numberblocks- your turn https://www.bbc.co.uk/iplayer/episode/m000t16h/numberblocks-series-5-your-turn
	Find my pattern	Sharing https://whiterosemaths.com/homelearning/early-years/find-my-pattern-week-2/	Teddy bear picnic The doorbell rang Grouping	Number blocks- sign of the times https://www.bbc.co.uk/iplayer/episode/m0006w5r/numberblocks-series-4-sign-of-the-times Numberblocks-fun fair times https://www.bbc.co.uk/iplayer/episode/m0006xcc/numberblocks-series-4-fun-times-fair
	Find my pattern	Even and odd One odd day https://www.youtube.com/watch?v=e5AKZ_R46lE https://whiterosemaths.com/homelearning/early-years/find-my-pattern-week-3/	How many cubes Barrier game	Numberblocks-the lair of shares https://www.bbc.co.uk/iplayer/episode/m0006xcw/numberblocks-series-4-the-lair-of-shares Numberblocks- terrible twosday https://www.bbc.co.uk/iplayer/episode/m0006xds/numberblocks-series-4-terrible-twosday Numberblocks-divide and drive https://www.bbc.co.uk/iplayer/episode/m0006xfs/numberblocks-series-4-divide-and-drive Numberblocks-odds and evens https://www.bbc.co.uk/iplayer/episode/b08r2l4d/numberblocks-series-2-odds-and-evens

				Numberblocks-the two tree https://www.bbc.co.uk/iplayer/episode/b08r3t8t/numberblocks-series-2-the-two-tree?seriesId=m0005y7k Numberblocks-the wrong number https://www.bbc.co.uk/iplayer/episode/b0bp2yc2/numberblocks-series-3-the-wrong-number
	First, then and now	Adding more https://whiterosemaths.com/homelearning/early-years/first-then-now-week-1/	Adding more- unknown then Adding more- first unknown Track game- counting on	Numberblocks- tens place https://www.bbc.co.uk/iplayer/episode/m0005y9m/numberblocks-series-4-tens-place Number blocks- balancing bridge https://www.bbc.co.uk/iplayer/episode/m0005y9r/numberblocks-series-4-balancing-bridge Numberblocks-16https://www.bbc.co.uk/iplayer/episode/m0005yfs/numberblocks-series-4-sixteen Numberblocks- square club https://www.bbc.co.uk/iplayer/episode/m00063vq/numberblocks-series-4-square-club
	First, then and now	Taking away https://whiterosemaths.com/homelearning/early-years/first-then-now-week-2/	Taking away- unknown then Pass it on game Take away with pebbles	Numberblocks-17 https://www.bbc.co.uk/iplayer/episode/m00063vv/numberblocks-series-4-seventeen Numberblocks 18 https://www.bbc.co.uk/iplayer/episode/m00064tz/numberblocks-series-4-eighteen?seriesId=b0bl5v3r Numberblocks-19 https://www.bbc.co.uk/iplayer/episode/m000663t/numberblocks-series-4-nineteen?seriesId=m000t16j Numberblocks- loop the loop https://www.bbc.co.uk/iplayer/episode/m00064v6/numberblocks-series-4-loop-the-loop

	First, then and now	Spatial reasoning Compose and decompose Grandpa's quilt https://whiterosemaths.com/homelearning/early-years/first-then-now-week-3/	Making new shapes with 2 right angle triangles Making new shapes with squares Making new shapes with tangrams Pattern blocks	Numberblocks-20 https://www.bbc.co.uk/iplayer/episode/m0006rr5/numberblocks-series-4-twenty Numberblocks- tall stories https://www.bbc.co.uk/iplayer/episode/m0006rrg/numberblocks-series-4-tall-stories Numberblocks-flights of fancy https://www.bbc.co.uk/iplayer/episode/m0006rrv/numberblocks-series-4-flights-of-fancy
	To 20 and beyond	Number patterns to 20 Matching pictures and numerals https://whiterosemaths.com/homelearning/early-years/to-20-beyond-week-1/	Ten frame fill beyond 10 Estimating game Subtraction from ten frames game	Numberblock rally https://www.bbc.co.uk/iplayer/episode/b0bn5bpz/numberblocks-series-3-numberblock-rally Numberblock- 11 https://www.bbc.co.uk/iplayer/episode/m000266y/numberblocks-series-3-eleven?seriesId=m000t16j Numberblock- rectangle https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle Numberblock-12 https://www.bbc.co.uk/iplayer/episode/m0002674/numberblocks-series-3-twelve?seriesId=m000t16j Numberblock-ride the rays https://www.bbc.co.uk/iplayer/episode/m0002724/numberblocks-series-3-ride-the-rays

	To 20 and beyond	Ordering numbers to 20 https://whiterosemaths.com/homelearning/early-years/to-20-beyond-week-2/	Missing numbers Race game to 20 Bingo with numbers to 20 Which holds the most?	Numberblock- block star https://www.bbc.co.uk/iplayer/episode/m0002720/numberblocks-series-3-block-star Numberblock- 13 https://www.bbc.co.uk/iplayer/episode/m00029t7/numberblocks-series-3-thirteen?seriesId=b0bl5v3r Numberblock- 14 https://www.bbc.co.uk/iplayer/episode/m00029tp/numberblocks-series-3-fourteen Numberblock- 15 https://www.bbc.co.uk/iplayer/episode/m00029tw/numberblocks-series-3-fifteen?seriesId=b08bzg8q Numberblock- ten vaulting https://www.bbc.co.uk/iplayer/episode/m000t8cx/numberblocks-series-5-ten-vaulting
	To 20 and beyond	Shapes Match, rotate, manipulate https://whiterosemaths.com/homelearning/early-years/to-20-beyond-week-3/	Find my match with shapes Find my match with models Match and fill Replicate my model Tangrams	Numberblock- tween scenes https://www.bbc.co.uk/iplayer/episode/m00029vj/numberblocks-series-3-tween-scenes?seriesId=m000t16j Numberblocks- 3 step squads https://www.bbc.co.uk/iplayer/episode/m00029vq/numberblocks-series-3-step-squads Numberblocks- fifteen https://www.bbc.co.uk/iplayer/episode/m0005y7j/numberblocks-series-4-fifteens-minute-of-fame Numberblocks- on yourhead https://www.bbc.co.uk/iplayer/episode/m0005y7p/numberblocks-series-4-on-your-head
	On the move	Deepening understanding Harry and His Bucketful of Dinosaurs by Ian Whybrow Mr Gumpy's Outing by John Burningham		Numberblocks- 21 and on https://www.bbc.co.uk/iplayer/episode/m0007g91/numberblocks-series-4-twenty-one-and-on

		How Many Legs? by Kes Gray & Jim Field Materials for building boats and bridges https://whiterosemaths.com/homelearning/early-years/on-the-move-week-1/		Numberblocks-square hunt https://www.bbc.co.uk/iplayer/episode/m0007gbz/numberblocks-series-4-were-going-on-a-square-hunt Numberblocks- 30 https://www.bbc.co.uk/iplayer/episode/m0007gbh/numberblocks-series-4-thirtys-big-top Numberblocks-land of the giants https://www.bbc.co.uk/iplayer/episode/m0007gcv/numberblocks-series-4-land-of-the-giants
	On the move	Patterns and relationships Hoops and bean bags Pattern Fish by Trudy Harris https://whiterosemaths.com/homelearning/early-years/on-the-move-week-2/	Cuisenaire rods	
	On the move	Spatial reasoning Little Red Riding Hood – Traditional Tale. Objects for building an obstacle course https://whiterosemaths.com/homelearning/early-years/on-the-move-week-3/	Making maps Journeys to school	

Extensions

Series 4 https://www.bbc.co.uk/iplayer/episode/m0007ln6/numberblocks-series-4-one-thousand-and-one

https://www.bbc.co.uk/iplayer/episode/m0007ll3/numberblocks-series-4-more-to-explore

https://www.bbc.co.uk/iplayer/episode/m0007lkw/numberblocks-series-4-one-hundred

https://www.bbc.co.uk/iplayer/episode/m0007jym/numberblocks-series-4-fifty

https://www.bbc.co.uk/iplayer/episode/m0007n47/numberblocks-series-4-sixtys-high-score

https://www.bbc.co.uk/iplayer/episode/m0007llc/numberblocks-series-4-the-big-one

Series 5
Number bonds to make 20- https://www.bbc.co.uk/iplayer/episode/m000t8dg/numberblocks-series-5-the-many-friends-of-twenty

Multiplication- https://www.bbc.co.uk/iplayer/episode/m000tb83/numberblocks-series-5-two-times-shoe-shop

Arrays- https://www.bbc.co.uk/iplayer/episode/m000thl6/numberblocks-series-5-rectangle-racers