Reception Mathematics SOL

<table>
<tr><th></th><th>Week 1</th><th>Week 2</th><th>Week 3</th><th>Week 4</th><th>Week 5</th><th>Week 6</th><th>Week 7</th><th>Week 8</th><th>Week 9</th><th>Week 10</th><th>Week 11</th><th>Week 12</th></tr>
<tr><td>Autumn</td><td colspan="2">Getting to know you

Routines
Baseline</td><td colspan="5">It's me 1, 2, 3

Circles and Triangles</td><td>Positional Language</td><td colspan="3">1,2,3,4,5

Shapes with 4 sides</td></tr>
<tr><td>Spring</td><td colspan="2">Alive in 5</td><td>Mass & Capacity</td><td colspan="3">Growing 6, 7, 8</td><td>Length, Height & Time</td><td colspan="2">Building 9 and 10</td><td colspan="2">Explore 3D shapes.</td></tr>
<tr><td>Summer</td><td>How many now?</td><td colspan="3">Sharing & Grouping</td><td>Manipulate, compose & decompose</td><td>Visualise, build & Map</td><td colspan="2">To 20 & beyond</td><td>Making connections</td><td>Problem Solving</td><td colspan="2">On the move</td></tr>
</table>

Reception Mathematics Medium Term Plan

<table>
<tr><th colspan="3">Autumn</th></tr>
<tr><th>Week</th><th>Focus</th><th>Additional</th></tr>
<tr><td>Week 1</td><td rowspan="2"><u>Getting to know you</u>

Revisit numbers 1-5 – oral counting.
1:1 correspondence- counting up to 5 objects reliably by moving or touching each object once
Stable-order – ensuring children say the numbers in the correct order
Cardinality – knowing that the last number said is the total/ being able to count out a given amount from a larger set
Abstract – counting things that cannot be touched i.e. actions, claps, jumps
Order-irrelevance – counting objects and amounts that are placed in random orientations</td><td rowspan="2"><u>Baseline to be completed.</u>

Anno's Counting Book – M Anno

The Very Hungry Caterpillar – Eric Carle

Key vocabulary: count, how many, total, altogether, cardinal number
The cardinal number is _____.

Numberblocks Season 1 episodes 9 and 10</td></tr>
<tr><td>Week 2</td></tr>
<tr><td>Week 3</td><td rowspan="2">Number 1
understand the concept of 1,
understand what '1' means,
see when there is one item
be able to select 1 object from a larger group
be able to write the numeral 1
see that 1 can represent actions as well as physical objects
relate the number/numeral 1 to things that they know
subitise 1 and see the different with 'more than 1'
know that a circle is a shape with 1 side
be able to select a circle from a group of shapes
be able to name a circle when shown one</td><td rowspan="2"><u>White Rose– It's me 1, 2, 3</u>
<u>White Rose – Circles and triangles</u>

Numberblocks Season 1 Episode 1

Introduction of 5s frame</td></tr>
<tr><td>Week 4</td></tr>
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	• 3D shapes with circular faces (cylinder/sphere/cone) • 1 o'clock • 1p • Numicon 1	
Week 5 Week 6	• Number 2 • understand the concept of 2, • understand what '2 is one more than 1', • see when there are two items • be able to select 2 objects from a larger group • be able to write the numeral 2 • count to 2 • see that 2 can represent actions as well as physical objects • relate the number/numeral 2 to things that they know • subitise 2 and see that it is '1 more than 1' • semi-circles have 2 sides • differentiating between 1 and 2 (sorting) • 2 o'clock • 2p • Numicon 2	**White Rose– It's me 1, 2, 3** Numberblocks Season 1 Episode 2 and 3
Week 7 Week 8	• Number 3 • understand the concept of 3, • understand what '3' means, • see when there are 3 items • be able to select 3 objects from a larger group • be able to write the numeral 3 • see that 3 can represent actions as well as physical objects • relate the number/numeral 3 to things that they know • subitise 3 • understand that 3 is one more than two • understand that 2 is one less than 3	**White Rose– It's me 1, 2, 3** **White Rose – Circles and triangles** Numberblocks Season 1 Episode 4 and 5 Introduction of part-whole model

	• to use vocabulary such as biggest and bigger to compare numbers and amounts • to begin to understand the addition symbol and what it means • triangles (all types) • 3D shapes with triangular faces (pyramids, triangular prism) • 3 o'clock • Numicon 3 • Comparing 1, 2 and 3 • to be able to order numbers 1, 2 and 3.	
Week 9	• Positional Language • Describe a familiar route • Discuss routes and locations using language such as in front/ behind/ next to/ between/ on/ under etc…	**White Rose– It's me 1, 2, 3**
Week 10	• Number 4 • understand the concept of 4, • understand what '4 is one more than 3', and 3 is one less than 4 • see when there are 4 items (subitise) • be able to select 4 objects from a larger group • be able to write the numeral 4 • count to 4 • see that 4 can represent actions as well as physical objects • relate the number/numeral 4 to things that they know • know that a square has 4 sides (equal) and 4 corners • know that a rectangle has 4 sides (2 long 2 short) and 4 corners • to be able to select a square and rectangle from a selection of shapes • to be able to name a square or rectangle when shown one • 4 o'clock • Numicon 4	**White Rose– Light and Dark** (old) **White Rose – 1,2,3,4, 5** (new) **White Rose – Shapes with 4 sides** (new Numberblocks Season 1 Episode 6 and 8 Introduction of addition symbol and concept of addition

Week 11 Week 12	• Number 5 • understand the concept of 5 • understand what '5 is one more than 4', and 4 is one less than 5 • see when there are 5 items (subitise) • be able to select 5 objects from a larger group • be able to write the numeral 5 • count to 5 • see that 5 can represent actions as well as physical objects • relate the number/numeral 5 to things that they know • 5 o'clock • 5p • Numicon 5	**White Rose – 1,2,3,4, 5** (new) Numberblocks Season 1 Episode 7 Introduction of addition using a fives frame Numberblocks series 3 – fruit salad/ numberblock express Number bonds to 5

<table>
<tr><th colspan="3">Spring</th></tr>
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<tr><td>Week 1

Week 2</td><td>Introducing zero
Comparing numbers to 5
Revisiting composition of 4 and 5
Begin to identify and recall number bonds to 5</td><td><u>White Rose – Alive in 5</u>

Numberblocks Season 1 Episode 7, 9, 10, 11, 12, 14 and 15.
Season 3: once upon a time, blockzilla and the numberblocks express.

Introduction of part-whole model to identify bonds
Numberblocks series 3 – fruit salad/ numberblock express
Number bonds to 5</td></tr>
<tr><td>Week 3

Week 4</td><td>Weight, mass, capacity
Empty, full and half full including nearly full and nearly empty
Use different containers and different shapes– cups, bowls, spoons etc
Use different materials – rice, water, sand, beans, water etc
Language such as tall, thin, narrow, wide, shallow to describe containers and capacities
Comparisons – pouring from one container to the next –
Comparisons – how many will take it to fill this container using different materials/equipment etc…
Heavy and light – comparing and estimating and ordering from lightest to heaviest and vice versa
Avoiding misconceptions such as “bigger means heavier”
LINK TO NUMBERS TO 5 ALSO – balancing</td><td><u>White Rose – Alive in 5</u>
<u>White Rose – Mass and Capacity</u>
(new)</td></tr>
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Week 5	Number 6 • understand the concept of 6 • understand what '6 is one more than 5', and 5 is one less than 6 • be able to select 6 objects from a larger group • be able to write the numeral 6 • count to 6 • see that 6 can represent actions as well as physical objects • relate the number/numeral 6 to things that they know • a hexagon has six sides • 6 o'clock • Numicon 6 • Composition of 6 – part whole model	**White Rose: Growing 6, 7, 8** Numberblocks episodes: meet six and counting sheep. Introduction of 10s frames.
Week 6	Number 7 • understand the concept of 7 • understand what '7 is one more than 6', and 6 is one less than 7 • be able to select 7 objects from a larger group • be able to write the numeral 7 • count to 7 • see that 7 can represent actions as well as physical objects • relate the number/numeral 7 to things that they know • subtraction means take away • when we subtract, the number gets smaller • 7 o'clock • Numicon 7 • Composition of 7 – part whole model	**White Rose: Growing 6, 7, 8** Numberblocks episodes: meet seven, fluffies, numberblock rally, what's the difference. Introduction of subtraction symbol and concept

Week 7	Number 8 • understand the concept of 8 • be able to write the numeral 8 • relate the number/numeral 8 to things that they know • octagons have 8 sides • 8 o'clock • Numicon 8 • Composition of 8 – part whole model	**White Rose: Growing 6, 7, 8** Numberblocks episodes: meet eight and octoblock to the rescue.
Week 8	Length & Height • Tall and short – comparing and ordering lengths and heights. • Link to number – which is more and less? How many more/less?	**White Rose: Growing 6, 7, 8** (old) **White Rose – Length, Height and Time** (new)
Week 9	Number 9 • understand the concept of 9 • be able to write the numeral 9 • relate the number/numeral 9 to things that they know • 9 o'clock • Numicon 9 • Addition and subtraction within 9 • More and less within 9 • Composition of 9 – part whole model •	**White Rose: Building 9 and 10** Numberblocks: meet nine and the three threes.
Week 10	Number 10 • understand the concept of 10	**White Rose: Building 9 and 10**

Week 11	• be able to write the numeral 10 • relate the number/numeral 10 to things that they know • 10 o'clock • Numicon 10 • Addition and subtraction within 10 • More and less within 10 • Composition of 10 – part whole model • Number bonds to 10 • Number bonds to 10 • Building on knowledge of double 5 makes 10 – what other ways can we make 10? • 10 + 0, 9 + 1, 8 + 2, 7 + 3, 6 + 4, 5 + 5 (one or two per week to focus on) • Introduction of commutative numbers when adding – does it matter if it 7 and 3 or 3 and 7?	Numberblocks: meet ten, blast off, ten green bottle, now we are 6-10 and numberblobs. • Learning subtraction facts and fact families Numberblocks – blast off and ten again.
Week 12	• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	**White Rose– Building 9 and 10** (old) **White Rose – Explore 3D shapes** (new) Numberblocks: flatland, pattern palace

Summer		
Week	**Focus**	**Additional**
Week 1	Recap of numbers 1 – 10/ Addition and Subtraction • Use of real objects to see that quantity of groups can be changed by adding more or taking away some. • Mathematical stories and reasoning Begin to count from a given number i.e. adding 4 and 3 teaching children to hold 4 in their head and count of 3 more (no need to start at 1)	**White Rose – First, then and now** (old) **White Rose – How many now?** (new)
Week 2	Odd and even numbers • Sharing and grouping – general that things can be shared • Understanding 2 equal groups • Pairing items • Introduction of even • Counting in 2s to 10 • What happens if we cannot share equally? Introduction of odd.	**White Rose – Find my pattern** (old) **White Rose – Sharing and grouping** (new) Numberblocks – odds and evens
Week 3	Sharing and Grouping • Explore sharing and grouping into equal and unequal groups. • Begin to identify doubles.	**White Rose – Find my pattern** (old) **White Rose – Sharing and grouping** (new)
Week 4	Doubles • Understanding doubling means 'twice as many. • Using mirrors to see doubling • Using tens frames, dominoes etc to double numbers • Early symmetry – butterflies, ladybirds etc	**White Rose – Find my pattern** (old) Numberblocks – terrible twos, counting sheep and double trouble.

Week 5	Manipulate, compose and decompose using 2D shapes • Select, rotate and manipulate shapes in order to develop spatial reasoning skills.	**White Rose – Manipulate, compose and decompose** (new)
Week 6	Patterns, mapping, visualising and building. • Identify repeating patterns. • Continue patterns. • Spot errors in patterns. • Replicate scenes and constructions. • Visualise from different viewpoints.	**White Rose – Visualise, build and map** (new)
Week 7 Week 8	Numbers beyond 10 • Understanding 'teen' numbers are made from one ten and x ones. • Identifying the pattern to our counting system. • Explore numbers 11-20.	**White Rose –To 20 and beyond**
Week 9	Deepening understanding of numbers Exploring relationships between numbers	**White Rose – Make connections** (new)
Week 10	Problem solving • Applying mathematical knowledge to solve problems within 10 (how many legs in the boat.)	

Week 11	• Consolidation of skills throughout the year • Getting children ready for Y1	**White Rose – On the move** (old)
Week 12		