

Reception Yearly Overview for Mathematical Development WRM scheme, Mathseeds and Links to Science WRM scheme

Autumn 1	NCETM – Mastering Number (Number Ninja)	WRM (Maths Monkey)	Autumn 1	WR Science	
Week 1		Getting to know you			
Week 2		Block 1: Match, sort and compare	Step 1 – Match objects	Block 1: Me and my small world	
Week 3	W1 - Subitising		Step 2 - Match pictures and objects Step 3 - Identify a set		Step 1 - name farm animals
Week 4	W2 - Counting, Cardinality and ordinality		Step 4 – Sort objects to a type Step 5 – Explore sorting techniques		Step 1 - name farm animals
Week 5	W3 - Composition		Step 6 – Create sorting rules Step 7 – Compare amounts		Step 2 - identify body parts
Week 6	W4 - Subitising	Block 2: Talk about measure and pattern	Step 1 – Compare size Step 2 – Compare mass	Block 2: What’s in my basket	Step 1 - Begin to categorise the fruit and veg according to their features such as colour, texture, size and shape.
Week 7	W5 - Comparison		Step 3 – Compare capacity Step 4 – Explore simple patterns		Step 2 - Explore which containers could be more suitable to carry the lunch
Week 8	6 - Counting, ordinality and cardinality		Step 5 – Copy and continue a simple pattern Step 6 – Create simple patterns		LINKS TO HARVEST

Autumn 2 mathseeds	NCETM – Mastering Number (Number Ninja)	WR Maths (Maths Monkey) <u>Autumn 2</u>		WR Science (with maths link)	
Week 1 Lesson 13- big and small	W6 - Counting, ordinality and cardinality Focus on counting skills Focus on the 'five-ness of 5' using one hand and the die pattern for 5	Block 3: It's me 1,2,3	Step 1 - Find 1, 2 and 3 Step 2 - Subitise 1, 2 and 3 Step 3 - Represent 1, 2 and 3	Block 3: Senses	Step 1 – Focus on hear and see (Linked to represent 1,2,3)
Week 2 Lesson 27 - pattern	W7 – Comparison Comparison of sets - by matching Use the language of comparison: more than, fewer than, an equal number		Step 4 - 1 more Step 5 - 1 less Step 6 - Composition of 1, 2 and 3		Step 2 – Focus on feel, smell and taste (linked to 1 more)
Week 3 Lesson 9 triangles	W8 – Composition Explore the concept of 'whole' and 'part'	Block 4: Circles and triangles	Step 1 - Identify and name circles and triangles Step 2 - Compare circles and triangles Step 3 - Shapes in the environment Step 4 - Describe position	Block 4: Let's go outside	Step 1- Explore natural world (linked to shapes in the environment)
Week 4 Lesson 29 – heavy/ light	W9 – Composition Focus on the composition of 3, 4 and 5	Block 5: 1 2 3 4 5	Step 1 - Find 4 and 5 Step 2 - Subitise 4 and 5 Step 3 - Represent 4 and 5	Block 5: What's changed	Step 1 – Explore Simple changes – Melting Chocolate (linked to represent 4 and 5)
Week 5 Lesson 10 1-5	W10 - Counting, ordinality and cardinality Practise object counting skills Match numerals to quantities within 10 Verbal counting beyond 20		Step 4 - 1 more Step 5 - 1 less Step 6 - Composition of 4 and 5 Step 7 - Composition of 1–5		Step 2 – Explore Simple changes – Making dough (linked to 1 less)
Week 6 Lesson 6 squares	Consolidation	Block 6: Shapes with 4 sides	Step 1 - Identify and name shapes with 4 sides Step 2 - Combine shapes with 4 sides Step 3 - Shapes in the environment Step 4 - My day and night	Block 6: Night and Day	Step 1 -Nocturnal Animals (linked to my day and night)
Week 7 Lesson 15 rectangles	Consolidation				

Spring term 3 mathseed	NCETM – Mastering Number (Number Ninja)	WR Maths (Maths Monkey) <u>Spring term 3</u>		WR Science (with maths link)	
Week 1 Zero-lesson 18	W11 subitising skills with linear and paired arrangements match arrangements of 3, 4 and 5 dots to the correct numerals. use dice to link subitised amounts with 1-to-1 counting actions use die patterns to play track games.	Block 1 Alive in5:	Step 1 -Introducing zero Step 2 – Find 0-5 Step 3 – Subitise to 5 Step 4 -Representing 0-5	Block 1 : Changes in Winter	Step 1 - Winter walk/ discussion – sort winter seasons sheet.
Week 2 Add to 5 lesson 24	W12 recognise numerals 1–5 order numbers from 1–5. match numerals to quantities in order See the staircase pattern and recognise that each number is 1 more		Step 5 – 1 more Step 6 – 1 less Step 7 – Composition Step 8 – Conceptual subitising to 5		Step 2 – Hibernation – Sort animals which hibernate
Week 3 Mass lesson 29	W13 see that 5 can be partitioned into 4 and 1 see that 5 can be partitioned into 3 and 2. find ways to partition a set of 5 use what they know about 5 to work out a hidden number.	Block :2 Mass and capacity	Step 1 - Compare mass Step 2 – Find a balance Step 3 – Explore capacity Step 4 – Compare capacity	Block2 : Let it flow	Step 1- Investigating floating and sinking
Week 4 Number 6 Lesson 11	W-14 represent 4 in different ways on a die frame. use double dice frames to represent 6 as 5 and 1 more. see that 5 and '2 more' make 7. add another block to make 7	Block 3 Growing 6,7,8	Step 1 – Find 6,7,8 Step 2 – Represent 6,7,8 Step 5 – Composition 6,7,8 Step 3 – 1 more Step 4 – 1 less	Block 3 : From Desert to Jungle	Step 1 –Desert Animals and their habitat
Week 5 Number 7 Lesson 11	W-15 know that it is quantity – not colour – that determines if 1 set has more or fewer of the same type of object than another. know that it is quantity – not colour or size – that determines if 1 set has more or fewer of the same type of object than another. know that it is quantity – not colour, size or type of object – that determines if 1 set has more or fewer items than another.		Step 1 – Find 6,7,8 Step 2 – Represent 6,7,8 Step 5 – Composition 6,7,8 Step 3 – 1 more Step 4 – 1 less		Step 2 – Jungle Animals and their habitat
Week 6 Number 8 Lesson 11	Revise/ revisit		Step 6 – MAKING pairs odd and even Step 7 Double 8 – find a double Step 8 - Double 8 – MAKE a double (4 Days as inset day) Step 9 – Combine2 groups Step 10 - Conceptual Subitising – SPRING 4		Step 2 – Sorting Desert and Jungle animals .

Spring term 4 mathseed	NCETM – Mastering Number Spring term 4 (Number Ninja)	WR Maths (Maths Monkey)		WR Science (with maths link)	
Week 1 Lesson 26 long and short	W16 : Counting, ordinality and cardinality Focus on the ‘staircase’ pattern and ordering numbers revisit the principles of counting. use generalised statements to describe the ‘5 and a bit’ composition of the numbers 6–8 investigate the ‘1 more/1 less’ pattern of the base-10 counting system begin to order numbers between 1 and 10, noticing the ‘5 and a bit’ structure.	Catch-up Block 4 Length Height and Time	Step 9 – Combine 2 groups Step 10 - Conceptual Subitising – SPRING 4 from last term Step 1 - Explore length Step 2 – Compare length	Block 4 : Watch it grow	Step 1 – Observe plants/ flowers – draw them
Week 2 Lesson 16 - numbers 1-8	W17 Comparison Focus on ordering of numbers to 8 Use language of less than subitise arrangements of 6 and NOT 6 order Numberblock images to 8. represent 8 as ‘5 and 3 more’ describe how to place the numbers 1 to 8 in order explain how to order quantities to 10 reason about which numbers are ‘more than’ others. notice when numbers are increased or decreased and explain their thinking		Step 3 –Explore height Step 4 -Compare height Step 5 –Talk about time Step 6 - Order and sequence time	Block 4 : Watch it grow	Step 2 – Plant seeds
Week 3 Lesson 17 number 9	W18 Composition Focus on 7 use skills of conceptual subitising to describe parts of a whole set visualise arrangements and use gestures to describe the numbers within a whole set investigate ways of making 7 with two parts use their fingers to make and describe 7 as ‘5 and 2 more’. notice when towers are made of 7 or NOT 7 interlocking cubes work out the missing part of 7 using the ‘5 and a bit’ structure. see that 7 can be composed in different ways explain their understanding of the composition of 7.	Block :5 Building 9 and 10	Step 1- Find 9 and 10 Step 2 – Compare numbers to 10 Step 3 –Represent 9 and 10 Step 4 – Conceptual subitising to 10	Block 5: Animal detectives	Step 1- Name/ describe animals – discuss similarities and differences
Week 4 Lesson 19 number 10	W –19 Composition Doubles – explore how some numbers can be made with 2 equal parts practise identifying when 2 sets are equal in number. identify when a double is shown and explain why identify when a double is shown and explain why say what the whole is when there are 2 equal parts. say what the whole is when there are 2 equal parts use objects to make doubles patterns and describe what they can see show doubles patterns on their fingers in response to being given the whole use positional language to describe spatial arrangements of objects visualise doubles patterns to 5 and 5		Step 5 – 1 more Step 6 – 1 less Step 7 –Composition to 10 Step 8 – Bonds to 10 (2 parts) Step 9 -make arrangements of 10		Step 2 – sort animals
Week 5 Lesson 22 more less same	W –20 Composition Sorting numbers according to attributes - odd and even numbers say what the whole is when there are 2 equal parts recognise and talk about ways in which objects are similar to or different from each other (colour, size, function, shape, etc.) sort objects according to attributes described by an adult say what the whole is when there are 2 equal parts describe attributes of the Numberblocks sort the Numberblocks using the criteria ‘odd blocks’ or ‘even tops’ say what the whole is when there are 2 equal parts describe attributes of the Numberblocks investigate patterns of doubles		Step 10 -Bonds to 10 (s parts) Step 11 – Doubles to 10 (find a double) Step 12 – Doubles to 10 (make a double) Step 13 – Explore odd and even	Block 6 : Pushes and Pulls	Step 1 – Explore forces – pushing down ramps
Week 6 Lesson 35 3d objects	Revise/ revisit	Block :6 3-d shape	Step 1- Recognise and name 3-D shapes Step 2-Find 2-D shapes within 3-D shapes Step 3- Use 3-D shapes for tasks Step 4 – 3-D shapes in the environment Step 5 Identify more complex patterns Step 6 - Copy and continue patterns Step 7 -Patterns in the environment		Step 2 – Explore materials – pull and push - magnets

Summer term 5 mathseed	NCETM – Mastering Number (Number Ninja) <h2 style="text-align: center; text-decoration: underline;">Summer term 5</h2>	WR Maths (Maths Monkey)		WR Science (with maths link)	
1 Lesson 41 no's 11 - 12	<u>Week 21 - Counting, Ordinality and cardinality</u> <u>Counting – larger sets and things that cannot be seen</u> A key area of focus this week will be to develop confidence in counting strategies, including counting on from different starting numbers. The children will also consider strategies for counting larger numbers of objects, including those that cannot be moved	Block 1 To 20 and Beyond	Step 1 - Build numbers beyond 10 (10–13) Step 2 – Continue patterns beyond 10 (10–13) Step 5 – Verbal counting beyond 20	Block 1: From City to Sea	Step 1 – Similarites and differences CITIES AND VILLAGES - pollution
2 L43 no's 13,14,15	<u>Week 22 - Subitising</u> <u>Subitising – to 6, including in structured arrangements</u> This week, the children will continue to develop their subitising skills (seeing the quantity without counting) in increasingly complex arrangements. Some arrangements are easier to subitise than others – e.g. a set of 6 dots arranged in a structured die pattern that exposes the double-3 pattern is easier to recognise than a random arrangement of 6 dots. A key focus this week is to use the children's developing understanding of doubles to support their subitising skills.		Step 3 – Build numbers beyond 10 (14–20) Step 4 - Continue patterns beyond 10 (14–20) Step 6 - Verbal counting patterns		Step 2 – Sea and Ocean - pollution
3 L30 adding 6	<u>Week 23 -Composition</u> <u>Composition – ‘5 and a bit’</u> This week, the children will consolidate their understanding of the composition of 5 and practise recalling the parts of 5 when 1 part is not visible. A key representation of the composition of 5 will be the fingers of 1 hand, and the children's attention will be focused on both the fingers that are ‘up’ and those ‘folded down’, connecting this to a rhyme about 5 kittens jumping ‘down’ from the bed. They will also be encouraged to subitise when an arrangement does show 5, and when it does not.	Block 2 How Many Now?	Step 1 - Add more Step 2 How many did I add?– Step 3 – Take away Step 4 – How many did I take away?	Block 2 Look all around	Step 1 - Walk – seasonal changes name features
4 L32 adding to 7	<u>Week 24 - Composition</u> <u>Composition - of 10</u> This week, the children will review the composition of the numbers 6 to 9 using the ‘5 and a bit’ structure, and then begin to explore how 10 can be composed. They will also develop a sense of the ‘ten-ness of 10’ by making their own collections of 10 objects. When exploring how 10 can be composed of 2 parts, the focus is on developing the children's ability to subitise the parts in structured arrangements	Block 3 : Manipulate, compose and decompose	Step 1 – Select shapes for a purpose Step 2 – Rotate shapes Step 3 – Manipulate shapes Step 4 Explain shape arrangements	Block 3 Test is out	Step 1 Materials – Problem solving
5 L35 -3d shapes cube and sphere	<u>Week 25 – Comparison</u> <u>Comparison – linked to ordinality</u> <u>Play track games</u> This week's activities will provide experiences that help the children to develop an understanding of the magnitude of numbers. Previously, the children have reasoned about the size of numbers through comparing sets of objects and identifying which set has more or fewer. This week, they will focus on ordinality: considering where numbers to 10 are in relation to each other. Through practical activities and games, the children will reason about numbers and think carefully about which is more or less. They will use linear number tracks to play games that encourage them to compare numbers that are far apart, near and next to each other. (For example, 10 is a lot more than 2 but 5 is only 1 more than 4.)		Step 5 - Compose shapes – Step 6 – Decompose shapes Step 7 – Copy 2-D shape pictures Step 8 - Find 2-D shapes within 3-D shapes		Step 2 – Materials – Waterproof or not.

Summer term 6	NCETM – Mastering Number (Number Ninja)	WRM	SUMMER 6	WR Science (with maths link)
MATHSEEDS		Maths (Maths Monkey)		
Week 1 Lesson 36 Add to 10	<u>LESSON 26</u> Subitise to 5 / Introduce the rekenrek	Block 4 <u>Sharing and grouping</u>	Step 1 - Explore sharing – Day 1 Step 2 – Sharing – Day 1 Step 3 - Explore grouping - Day 2 Step 4 – Grouping – Day 2 and (ELG – Number bonds to 5)	Block 4 <u>Happy and Healthy :</u> Step 1 – Healthy Eating Discuss the importance of a varied diet and that some food should be eaten every day whilst other food should only be eaten sometimes Plant individual beans for the children to take home at the end of term/ Caterpillars arrive
Week 2 Lesson 45 16,17	<u>LESSON 27 - Review and assess</u> <u>Automatic recall of bonds to 5</u>		Step 5 - Even and odd sharing – Day 1 Step 6 - Play with and build doubles - – Day 2 And (ELG - Number bonds to 10)	Step 2 – Exercise Explain the importance of exercise for keeping our bodies fit and healthy WALK TO THE CANAL
Week 3 Lesson 49 Doubles	<u>LESSON 28 Review and assess</u> <u>Composition of numbers to 10</u>	Block 5 <u>Visualise and build a map</u>	Step 1 - Identify units of repeating patterns Step 2 - Create own pattern rules Step 3 - Explore own pattern rules and (ELG – Addition/subtraction)	Block 5 <u>Our wonderful world</u> Step 1 - Recycling Discuss how children may sort their own rubbish at home into different bins or boxes.
Week 4 Lesson 37 Patterns2	<u>LESSON 29 Review and assess</u> <u>Comparison</u>		Step 4 - Replicate and build scenes and constructions Step 5 - Visualise from different positions Step 6 - Describe positions Step 7 - Give instructions to build	Step 2 – Pollination and plants that attract wildlife Plants that attract bees include mint and lavender, while cosmos and marigolds attract butterflies.
Week 5 Lesson 46 18,19,20	<u>LESSON 30 Review and assess</u> <u>Number patterns</u>		Step 8 - Explore mapping Step 9 - Represent maps with models Step 10 - Create own maps from familiar places Step 11 - Create own maps and plans from story situations	SCIENCE LINKED NATIONAL FOREST FARM VISIT
Week 6 Lesson 47 Subraction	<u>LESSON 31 Review and assess</u> <u>Counting</u>	Block 6 : <u>Make connections</u>	Step 1 - Deepen understanding	Block 6 <u>We're going on an animal hunt</u> Step 1 – Exploring different minibeasts
Week 7 Lesson 48 11-20	<u>CONSOLIDATION – PREP FOR YR 1</u>		Step 2 - Patterns and relationships	Step 2 – Minibeast hunt in the forest school area
Week 8 Lesson 50 Revise 0-20	<u>Assessment – party day/ toy day class visit</u>			

