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| **Reception Autumn Term Maths Planning**  |
| **White Rose Maths Units** | **Getting to Know Me**  | **Just Like Me** | **It’s 1,2,3** | **Light and Dark** |
|  | Show an awareness of numbers to 5 within the environment. Rote count to 10 within songs and games. Subitise to 3 (C and P) Compare amounts using the language of moreRead numerals to 5 – match an amount to these Compare shape and size Continue a repeating pattern | Match items that are the same – colour, size, shapes, numbers (representations) Sort items based on colour, size, shape, numbers (representations) Sorting with a variety of rules – children finding the rules, finding the odd one outComparing size, mass, capacity, amounts, quantities – using 1:1 correspondence – language of more, fewerBalancing size and massMaking simple patterns and spotting mistakes within patterns (Loose parts, construction, maths area, home corner, creative area, Finger Gym, outside area)  | Representing 1, 2, 3 using items, claps, actions Subitising to 3 Sorting and matching numerals and representationsComparing sets of numbers to 3Composition of numbers to 3 Shape – circles and triangles Spatial Awareness – using positional language (Home corner, dough station, loose parts, outside, storytime, role play, maths area (games), printing/creative area, small world,  | Awareness and composition of 4 – counting on and back, representations, counting actions and soundsAwareness and composition of 5 – counting on/back, representations, counting actions and soundsOne more/One less – exploring patterns within numbers, locating numbers on a number track, finding the missing numberNumber of the day – writing, counting, representingShapes with 4 sides Combining shapes (within shapes)Passing of time – looking at night and day, morning and night, number of days, sequencing events within the school day – ordering these, using language of now, next, before, after, then (Home corner, Role Play, outdoor area, washing lines, small world, mark making, construction area, maths in the community, creative area, loose part, story times |
| **Mastering Number Sessions** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** |
|  | * perceptually subitise within 3
* identify sub-groups in larger arrangements
* create their own patterns for numbers within 4
* practise using their fingers to represent quantities which they can subitise
* experience subitising in a range of contexts, including temporal patterns made by sounds.
 | * relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set
* have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song
* have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting
* have opportunities to develop an understanding that anything can be counted, including actions and sounds
* explore a range of strategies which support accurate counting.
 | * see that all numbers can be made of 1s
* compose their own collections within 4.
 | * understand that sets can be compared according to a range of attributes, including by their numerosity
* use the language of comparison, including ‘more than’ and ‘fewer than’
* compare sets ‘just by looking’.
 | * continue from first half-term
* subitise within 5, perceptually and conceptually, depending on the arrangements.
 | * continue to develop their counting skills
* explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand
* begin to count beyond 5
* begin to recognise numerals, relating these to quantities they can subitise and count.
 | * explore the concept of ‘wholes’ and ‘parts’ by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot
* explore the composition of numbers within 5.
 | * compare sets using a variety of strategies, including ‘just by looking’, by subitising and by matching
* compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
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| Milestones Expectations for End of Autumn Term Reception (to be On Track for GLD) | *I can count objects accurately to 10 using 1:1 correspondence**I can identify and compare groups of objects using same, less than and more than**I can understand the cardinal value of numbers to 5**I can subitise to 5**I can compose numbers to 5 (Number bonds)* *I can recognise numbers to 10**I can order these numbers**I can use some shape names* *I can use simple prepositional language**I can create a repeated pattern with colour and shapes (including manipulating shape)* *I can begin to write numerals 0 – 5* *I can compare and order using size and shape* |

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| **Reception Spring Term Maths Planning**  |
| **White Rose Maths Units** | **Alive in 5!**  | **Growing 6,7,8**  | **Building 9 and 10** | **Time to Consolidate**  |
|  | Introducing 0 as none, nothing, gone, star – where 0 sits on the number track – counting songs ending with 0Recognising the cardinal value of numbers to 5Comparing numbers to 5 – sharing fairly, representations, Composition of numbers 4 and 5 – concrete representations, number shapes, groups within numbers (PPW), hidden amounts/parts within 4 and 5, hidden number bonds, beginning to show this as number sentences Compare mass using language of heavier and lighterCompare capacity using language of full, nearly full, half and emptyBalancing number shapes – including composition to balance these (e.g. 5 in one side and 2 + 3 in the other) Number rhymes and action songs, sand, maths area, construction, small world, carpet sessions, water area, mud kitchen, role play,  | Counting 6, 7 and 8 – 1:1 counting, composition of these numbers, ordering numbers Making pairs – finding two of the same, various representations of the same, arranging numbers into pairs (concrete exploration of number bonds) recapping the use of number sentences to demonstrate the abstract representation of this Combining 2 groups – finding how many altogether, using concrete, pictorial, number storiesProblem solving using numbers to 8 – when combining groups or looking at compositionExploring length and height – measuring using non-standard units of measure, find method to measure, record and compare (using cubes, counters, hands etc) Comparison using mathematical languageTime – exploring key events, exploring changes over time, days of the week, language such as today, yesterday and tomorrow, events within a given time period (jumps in a minute) Maths area, loose part, outdoors, small world, role play, finger gym, discovery learning, science – growing and measuring, construction, dough, gross motor, fine motor, timed events, outdoor – using timers,  | Counting forwards and backwards up to and within 10Composition of these larger numbers, finding smaller numbers within these, beginning to estimate then counting to checkOrdering the numbers to 10Comparing numbers to 10, lining items up to support 1:1 counting and comparing, ordering 2 or more quantitiesNumber bonds to 10 – using concrete resources children to explore pairs of number that make 10 and begin recalling these, recalling number sentences, combing numbers to make simple additions within 10, introducing simple subtractions using hidden number bonds to support3D shape – building within constructions, introducing names and begin making comparisons and finding similaritiesPattern – building on previous pattern work, looking at similarities and differences, problem solving within patternsOutdoors, class stories, construction, Loose part, maths area, finger gym, mark making, carpet games, shapes, paint, modelling, dough, construction, creative,  | Recapping prior learning – ensuring number fluency using Mastering Number Programme  |
| **Mastering Number Sessions** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** |
|  | * increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements
* explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part
* experience patterns which show a small group and ‘1 more’
* continue to match arrangements to finger patterns.
 | * continue to develop verbal counting to 20 and beyond
* continue to develop object counting skills, using a range of strategies to develop accuracy
* continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10
* order numbers, linking cardinal and ordinal representations of number.
 | * continue to explore the composition of 5 and practise recalling ‘missing’ or ‘hidden’ parts for 5
* explore the composition of 6, linking this to familiar patterns, including symmetrical patterns
* begin to see that numbers within 10 can be composed of ‘5 and a bit’.
 | * continue to compare sets using the language of comparison, and play games which involve comparing sets
* continue to compare sets by matching, identifying when sets are equal
* explore ways of making unequal sets equal.
 | * explore symmetrical patterns, in which each side is a familiar pattern, linking this to ‘doubles’.
 | * continue to consolidate their understanding of cardinality, working with larger numbers within 10
* become more familiar with the counting pattern beyond 20.
 | * explore the composition of odd and even numbers, looking at the ‘shape’ of these numbers
* begin to link even numbers to doubles
* begin to explore the composition of numbers within 10.
 | * compare numbers, reasoning about which is more, using both an understanding of the ‘howmanyness’ of a number, and its position in the number system.
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| Milestones Expectations for End of Spring Term Reception (to be On Track for GLD) | *I can understand numbers beyond 5**I can count things that can’t be seen (sounds, claps, actions)**I can subitise to 6**I can compose and recall number bonds to 5 and use this with larger numbers**I can begin to record these compositions* *I can understand the cardinal value of numbers to 10**I can begin to write numerals to 10**I can count beyond 10 (recognising the pattern of counting to support)* *I can understand pattern and how this links to number**I can compare and order using size and shape using mathematical language**I can understand doubling as creating the same group twice and finding the total amount**I can recall names of simple shapes using mathematical language**I can select, manipulate and rotate shapes* |

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| **Reception Summer Term Maths Planning**  |
| **White Rose Maths Units** | **To 20 and beyond** | **First, Then and Now** | **Find My Pattern** | **On the Move** |
|  | **Consolidating number skills from prior to learning – throughout the whole of the Summer Term**Subitising – using a variety of representations, lots of opportunities for counting on and back within 10. Count required number of objects from a larger group, Sorting and matching and comparing and ordering Numbers beyond 10 – recognising number and counting patterns within and beyond 10. Representations showing 10 and a bit – looking at similarities and differences between numbers, matching numerals and representations. Exploring 100 (stories looking at bigger numbers – 1 is a snail, ten is a crab, How big is a million?)Spatial reasoning – exploring and investigating shapes, colour arrangements, pictures and patternsSmall world, loose parts, maths area, tens frames, number shapes, number games, puzzles and jigsaws, finger gym – shapes and geoboards, construction | Adding more – using first, then and now structure (first show this, then do this, now it is this) Taking away – using the first, then and now structure, using simple maths stories to include problem solving skills Finding hidden number bond, unknown parts to find how many were added, understanding of the commutativity of adding and the inverse – how many more/left.Spatial reasoning – exploring shapes within shapes, exploring tangrams, using maths resources to create patterns and fill spaces, Shape – exploring triangles and stars and finding shapes within, exploring tangrams, Maths area, carpet sessions, construction, finger gym, outdoors, games, small world, Number rhymes, Circle games,  | Exploring doubling – understanding twice as many using the same amountSharing and grouping – sharing into equal and unequal groups, grouping into specific numbersEven and Odd numbers – understanding that some numbers can be shared equally and that some can’tExploring number problems looking at odd and even, finding half, making equal groupsSpatial reasoning – exploring different positions, visualising simple models, using positional language, discussing models (or photos of models) they have made, arranging in a variety of waysMaths area, creative area, printing, finger gym, outdoor area, snack time, small world, loose parts and construction | Deepening the understanding for problem solving, using number stories Pattern and Relationships – investigating relationships between numbers and shapes (Numicon / Cuisenaire), repeating more complex patternsSpatial reasoning – make maps and plans to represent places, discuss where things are in relation to one another, using positional language, create their own maps of familiar places in the classroom, home or stories, follow a simple map or series of instructions to get to an end goalProblem solving using counting skills – exploring images (e.g. 5 rabbits – how many ears? the story How Many Legs?) Construction, Outdoors, Water area, maths area, stories, creative,  |
| **Mastering Number Sessions** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** | **Subitising** | **Cardinality, ordinality and counting** | **Composition** | **Comparison** |
|  | * continue to practise increasingly familiar subitising arrangements, including those which expose ‘1 more’ or ‘doubles’ patterns
* use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number
* subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10
* be encouraged to identify when it is appropriate to count and when groups can be subitised.
 | * continue to develop verbal counting to 20 and beyond, including counting from different starting numbers
* continue to develop confidence and accuracy in both verbal and object counting.
 | * explore the composition of 10.
 | * order sets of objects, linking this to their understanding of the ordinal number system.
 | There is more time within this half term to revisit misconceptions, address weaknesses and revisit prior learning in preparation for moving to Year 1. Children can be exploring problem solving and deepen the moment challenges in this time to help secure their number knowledge. |
| Milestones Expectations for End of Summer Term Reception (to be On Track for GLD) | *I can count up to beyond 20**I can compare numbers**I can identify 1 more/1 less**I can order numbers to 10**I can partition numbers to 10**I can explore the composition of numbers to 10**I can subitise to 6**I can automatically recall number bonds to 5* *I can recall double facts within 10**I can compare length, weight and capacity using mathematical vocabulary* *I can compose and decompose shapes to see other shapes within* |