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| **MATHEMATICS: NUMBER** |
| **EXCEEDING**Children estimate a number of objects and check quantities by counting up to 20. They solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups. |
| **Curriculum:**What is taught | **Teaching:**How curricular content is taught |
| How to solve problems involving combining groups of 2, 5 or 10, or sharing into equal groups | * White Rose Maths resources (Reception)
* Use NRICH problem-solving resources
* Share objects between groups of children or teddy bears!
* Use 2p, 5p and 10p coins
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| That objects can be combined into groups of 2, 5 or 10 to help us to count them | * White Rose Maths resources (Reception)
* Model counting groups of 2, 5 and 10, e.g. sets of artstraws etc.
* Practise making a tally and counting in fives, or counting animals going into the ark in pairs, etc.
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| What ‘estimate’ means and how to estimate then check a quantity of objects | * White Rose Maths resources (Reception)
* Use an estimation jar!
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| **ELG**Children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, involving doubling, halving and sharing. |
| **Curriculum:**What is taught | **Teaching:**How curricular content is taught |
| How to solve simple problems involving doubling, halving or sharing | * White Rose Maths resources (Reception)
* Share objects between children or teddy bears!
* Practise doubling through making towers or cubes that are double the height of another, or by threading double the number of beads
* Encourage children to make up their own number problems based around pictures or stories
* Use NRICH problem-solving resources
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| The concept of sharing and how to share a quantity or objects | * White Rose Maths resources (Reception)
* Read stories linked to concept of sharing
* Provide practical activities e.g. sharing 6 sheep between 2 barns
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| The concept of halving and how to halve a number or quantity | * White Rose Maths resources (Reception)
* Practise halving playdough cakes and groups of objects
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| The concept of doubling and how to double a number or quantity | * White Rose Maths resources (Reception)
* Investigate doubles using dominoes
* Can you roll a double number with two dice?
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| How to count on or back to find the answer to a simple + or – number sentence | * White Rose Maths resources (Reception)
* Use numberlines/ tracks, both table top and large scale ones which children can physically jump on
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| How to subtract single-digit numbers using objects | * White Rose Maths resources (Reception)
* Use stories and games e.g. bus
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| How to add two groups of objects (single-digit) to find a total | * White Rose Maths resources (Reception)
* Practise finding the total by combining two groups through play and through simple activities
* Investigate simple number bonds using a five frame or ten frame, or a cherry diagram
* Combine Numicon pieces to fit on a 5 or 10 piece
* Use bead strings
* Roll two dice and find the total
* Play ‘Bunny Ears’ – how many ways can you show 5 fingers?
* Investigate using two different colours of cubes and finding the total
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| How to find one more or one less than a given number | * White Rose Maths resources (Reception)
* Practise adding 1 more cube/ car/ dinosaur etc., and practise removing one to find one less
* Sing songs linked with one more/ one less e.g. 10 green bottles
* Show one more/ one less in a five frame/ ten frame
* Provide number lines and look at how to find one more/ one less on a number line. Play games by hiding a number.
* Provide simple frames: one less/ my number/ one more
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| The concepts of ‘more’ and ‘less’ | * White Rose Maths resources (Reception)
* Model and encourage use of comparative language: more than, fewer than, equal to, the same as
* Use dominoes – which side has more/ fewer dots?
* Ask, “Who has more?” and “Who has fewer?”
* Read stories linked with the concept of more, e.g. The Enormous Turnip
* Ask children to show you more or fewer than a set of objects
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| How to order numbers - to 3, to 5, to 10, to 15, to 20. | * White Rose Maths resources (Reception)
* Sing number songs
* Practise ordering numbers using different resources, e.g. carpet numbers, number cards, magnetic numbers, washing lines, etc.
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| That numbers identify how many objects are in a set.How to recognise numerals - to 3, to 5, to 10, to 15, to 20. | * White Rose Maths resources (Reception)
* Teach numbers using ‘Communication4All’ formation cards; review on a daily basis
* Provide number cards e.g. number bikes and ask children to match to the space with the corresponding number of dots, or matching numerals to quantities of objects
* Sort animals, e.g. 2 legs, 4 legs, etc.
* Celebrate numbers! E.g. Happy 5th Birthday – make cards, 5 candles, etc.
* Display numbers as they are learned
* Make books about numbers e.g. phone numbers, birthdays, etc.
* Teach the concept of 0 – an empty set
* Look for numbers in the local area, around school or around home
* Use Base 10 to make teens numbers
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| How to count using 1:1 correspondence – to 3, to 5, to 10, to 15, to 20. | * White Rose Maths resources (Reception)
* Singing counting songs and rhymes using fingers, puppets, pictures and objects and providing props for children to use themselves
* Read stories linked with numbers e.g. The Three Little Pigs
* Opportunities to count in different areas e.g. sand, water, role-play, etc. and promoted through questioning
* Provide a wide range of different counting resources e.g. counters, Numicon, cubes, etc.
* How many ways can you show 5 using multilink?
* CBeebies Numberblocks
* Count minibeast legs!
* ‘Pay’ for items with pennies
* Play counting games e.g. hide and seek
* Encourage mark making to record how many
* Playing simple games e.g. skittles
* Make simple pictograms with the children
* Show a number in different ways e.g. tally, objects, dice, Numicon, cubes, fingers, etc.
* Model counting using 1:1 correspondence
* Practise counting claps, jumps, hops, etc.
* Count the sounds! Drop pebbles into a bucket or pennies into a cup
* Model counting in both a line and a random layout; move on to positioning in a five frame/ ten frame and moving objects around whilst keeping the number of objects the same
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