Maths

Statutory Guidance from the EYFS Framework for Mathematics:

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.

NURSERY Number and Numerical Patterns

Intent Vocabulary Implementation

To recognise, name and match colours. To begin to show an interest in counting aloud verbally to 5. To be able to 'give 1' when asked. Count, number, one, colour, colour names, number songs. Adults providing colour matching activities and modelling naming colours, adults to model counting out during various activities and daily routines, adults to ask children for one of something and support children who are still learning to do this.

To be able to verbally count to 5 with developing accuracy. To develop an understanding of '2' e.g. giving 2 items or noticing 2 in the environment. Count, number, one, two, number songs. Adults to model counting out during various activities and daily routines, adults to ask children for two of something and support children who are still learning to do this.

To begin to be able to verbally count to 10 with developing accuracy. To develop an understanding of '3' e.g. giving 3 items or noticing 3 in the environment. To begin to compare quantities that are significantly more than and less/ fewer than visually without counting them. Count, number, one, two, three, number songs, more, less. Adults to model counting out during various activities and daily routines, adults to ask children for three of something and

To verbally count to 10 with developing accuracy. To develop an understanding of '4' e.g. giving 4 items or noticing 4 in the environment. To compare quantities that are significantly more and less visually without counting them. Count, number, one, two, three, four, number songs, more, less. Adults to model counting out during various activities and daily routines, adults to ask children for four of something and support children who are still

To accurately count to 10. To develop an understanding of '5' e.g. giving 5 items or noticing 5 in the environment. To play simple dice and track games developing Subitising skills. Count, number, one, two, three, four, five, number sonas, dice, die, track, counting on, subitise, without counting. Adults to model counting out during various activities and daily routines, adults to ask children for five of something and support children who are still

To begin to understand that 5 can be shown in different ways, To begin to subitise to 5. To count to 10 and beyond. Count, number, one, two, three, four, five, number songs, dice, die, track, counting on, subitise, without counting, number bonds, different. Children showing 5 on their fingers in different ways e.g. how many fingers are up and how many are down, children Subitising using dice, numicon or dot cards, children counting to 10 and beyond

| Intent Vocabulary Implementation WHITE ROSE MATHS LINKS | together, new shape, pictures and images, jigsaw, missing, turn, tessellate. Children to have access to shapes to play with and build pictures with, children to have access to puzzles to complete. UNITS COVERED | Compare, big, small, tall, short, different. Adults modelling the use of vocabulary, children completing activities based on height and size comparison. | In, out, on, shape, shape names, 3d shape, shape names, build, model, flat surface, smooth surface, curved surface. Adults modelling the use of positional language. 3D Shapes available in provision for children to build with – adults modelling the use of curves shapes Vs flat shapes. | instructions 'forwards' and 'backwards'. Long, short, describe, compare, height, size, forwards, backwards. Adults modelling the use of language, modelling forwards and backwards and playing games involving the skill. | some simple shapes – circle, square, triangle. Pattern, repeat, colour names, follow, copy, name, describe, shape, shape names, circle, square, triangle. Adults explaining what a pattern is and the rules of a repeating pattern, patterns in provision and activities, shapes for children to play with and use. UNITS COVERED | prepositional language. Heavy, light, weight, heavier, lighter, pattern, colour, repeat, up, down, under, on top, near, next to, across Children taking part in weight exploration tasks, children completing pattern tasks in guided activities, adults modelling prepositional language and supporting children to use these terms too. |
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| NURSERY Shape, Space and Measure | To be able to play with shapes and begin to make pictures with these. To build a simple jigsaw. Shape, shape names, | To begin to describe the height and size of something using the terms 'tall' or 'short' and 'big' or 'small'. | support children who are still learning to do this, activities based on more than and fewer than. To use positional language 'in', 'out', 'on'. To find shapes in the environment. To use 3D shapes to build models. | learning to do this, activities based on more than and fewer than. To use the terms 'long' and 'short' when describing height and size. To understand and follow the | learning to do this, dice and track guided activities and within the nursery provision. To begin to understand what a pattern is and follow a 2-part simple pattern. To begin to describe and name | during games, in adult guided groups or independently in play. To describe weight using 'heavy, light. To copy or create a 2-part pattern. To understand and use a range of |

than, same
Shape, Space and Measure 1 – Explore
and build with shapes and objects
Pattern 1 – Explore Repeats
Counting 1 – Hear and say number
names
Counting 2 – Begin to order number
names
Subitising – I see 1,2, 3
Pattern 2 – Join is with repeats
Shape, Space and Measure 2 – Explore
position and space
Subitising 2 – Show me 1, 2, 3
Counting – Move and label 1, 2, 3

Comparison 1 – more than, fewer

Objectives covered:

- -Exploring colours -Matching colours
- Naming colours -Finding a matching pair
- Exploring same and different
- Sort objects by colour, shape and size
- -Identifying sorting rules
- Explaining what they notice
- Identifying the numeral 1 and 2
- Subitising 1 and 2
- Counting ${\tt 1}$ and ${\tt 2}$
- Developing 1-1 correspondence
- Developing counting skill and technique
- Exploring and extending AB colour patterns

Shape, Space and Measure 3 –
Explore position and routes
Pattern 3 – Explore Patterns
Counting 4 – Take and give 1, 2, 3
Shape, Sapce and Measure 4 –
Match, talk, poush and pull
Subitising 3 – Talk about dots
Comparison2 - Compare and sort
collections

Pattern 4 – Lead on own repeats

Objectives covered:

- Identifying the numeral 3, 4, 5, 6 Subitising 3, 4, 5, 6
- Counting 123456 -Developing 1-1 correspondence
- Developing counting skill and technique
- Introduction to length and height
- Introduction to measurement related vocabulary
- Introduction to weight
- Learn about 2D shapes
- Introduction to mass related vocabulary
- Introduction to capacity
- Introduction to capacity related vocabulary

Shape, Space and measure 5 –
Start to puzzle
Pattern 5 – Making Patterns
together
Subitising 4 – Make games and
actions
Counting 5 – Show me 5
Pattern 6 – My own pattern
Counting 6 – Stop at 1,2,3,4,5
Comparision 3 – Match, sort,
compare

Objectives covered:

- Learning the days of the week Learning the routine
- -Sequencing the day and activities
- Learning and understanding positional language.
- -Adding one more -Taking one away
- -Ordering numerals to 5 -Estimating
- -Exploring and naming 2D shapes
- Using shapes to build pictures
- -Exploring and naming 3D shapes
- -Comparing more and less Counting amounts
- Building and splitting numbers in different ways
- Developing an in-depth understanding of which number comes next 1-5 and before 0-5.
- Getting ready for Reception

| Comparing length, weight, and capacity. Select, rotate, and manipulate shapes to develop spatial reasoning skills. Composing and decompose shapes so that children recognise a shape can have other shapes with throughout the year Mathematical knowledge regularly revisited Count objects, actions, and sounds. Introduction of singing rhymes. Happen, now, next, after that, smaller, larger, Count objects, actions, and sounds. Introduction of Subitising. Number names, count, without the year Count objects, actions, and sounds. Introduction of Subitising. Number names, count, without that, smaller, larger, count, without thout shape, shape | | numbers can | | | |
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| knowledge regularly revisited measures, verbally counting including when singing rhymes. Happen, now, next, after that, smaller, larger, has been described measures, verbally counting actions, and sounds. Introduction of subtissing. Subitising. Count, without counting, how that, smaller, larger, count, without many, shape, shape composition of numbers to 8 Subitiss (intro to conceptual) Recall number bonds o-8. Autom | Counting beyond ten. Comparing numbers. Understanding the 'one more/one less than' relationship between consecutive numbers. Comparing length, weight, and capacity. | | | | |
| Intent Vocabulary Implementation Intent Vocabulary Implementation Intent | mceptual) tomatic recall mber bonds o-10 mber, number mes, count, dition, larger, aller, odd, even, ore, less, number | Explore the composition of numbers beyond 10. Subitise (conceptual) Automatic recall number bonds 0-10 Number, number names, count, addition, larger, smaller, odd, even, more, less, number bonds. Continue to access mathematical continuous provision – tens frames, numicon, | | | |

| | | | one more and one less, starter activities to recap prior learning. | find all the ways to make each number. | number bond songs and using fingers to find answers. | number bond songs and using fingers to find answers. |
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| White Rose Maths EYFS Overview Where White Rose Number— related topics are indicated a combination of the topic and NCETM to be used. | Getting to Know you: Build trusting relationships -Ensure children have good levels of well-being and involvement to be ready to learn. Match, Sort and Compare: -Matching objects -Match pictures and objects -Identify a set -Sort objects to a type -Exploring sorting techniques -Create sorting rules -Compare amounts Talk about Measures and Patterns: Compare size -Compare capacity -Explore simple patterns -Copy and continue simple patterns -Create simple patterns | It' me 1,2,3!: Find 1, 2 and 3 -Subitise 1, 2 and 3 -Represent 1, 2 and 3 -1 more -1 less -Composition of 1, 2 and 3 Circles and Triangles: -Identify and name circles and triangles -Compare circles and triangles -Shapes in the environment -Describe position 1, 2, 3, 4, 5: Find 4 and 5 -Subitise 4 and 5 -Represent 4 and 5 -1 more -1 less -Composition of 4 and 5 -Composition of 1 5 Shapes with 4 sides: | Alive in 5: Introduce zero -Find o to 5 -Subitise o to 5 -Represent o to 5 Mass and Capacity Compare mass -Find a balance -Explore capacity -Compare capacity | Growing 6,7,8 (Continued): -Find 6,7,8 -Represent 6,7,8 -1 more -1 less -Composition of 6, 7, 8 Length, Height and Time: Explore Length -Compare Length -Compare Height -Compare Height -Compare numbers to 10 -Represent 9 and 10 - Conceptual subitising to 10 Explore 3D shape -Recognise and name 3D shapes -Find 2D Shapes within 3D shapes -Use 3D Shapes for tasks -3D Shapes in the environment | To 20 and Beyond: -Build Numbers beyond 10 (10 – 13) -Continue patterns beyond 10 (10 -13) -Build numbers beyond 10 (14 – 20) How Many Now? -Add more -How many did I add? -Take away -How many did I take away? Manipulate, compose and decompose - Select shapes for a purpose - Rotate shapes -: Manipulate shapes -: Manipulate shapes - Explain shape arrangements - Compose shapes - Decompose shapes - Copy 2-D shape pictures | Sharing and grouping - Explore sharing - Sharing (2 lessons) - Explore grouping Step 4: Grouping - Even and odd sharing (2 lessons) - Play with and build doubles (2 lessons) - Checkpoints Visualise, build and map - Identify units of repeating patterns - Create own pattern rules - Explore own pattern rules - Replicate and build scenes and constructions - Visualise from different positions - Describe positions Step 4: Give instructions to build |

| Identify and name | - Find 2-D shapes | - Represent maps |
|----------------------|----------------------|----------------------|
| shapes with 4 sides. | within 3-D shapes (2 | with models |
| -Combine shapes | lessons) | - Create own maps |
| with 4 sides | - Checkpoints | from familiar places |
| -Shapes in the | | - Create own maps |
| environment | | and plans from story |
| -My day and night | | situations |
| | | - Checkpoints |
| | | Make connections |
| | | - Deepen |
| | | understanding |
| | | - Patterns and |
| | | relationships |
| | | - Consolidation |
| | | |