Mathematics Yearly Progression in Reception

At St Joseph's we follow White Rose Maths. We teach Maths every day as a whole class session, as well as providing opportunities to practise the skills taught (in the indoor and outdoor classrooms). Every other week there will be a maths focus activity that all children are expected to complete with an adult, as well as weekly maths challenges that all children are encouraged to complete. The outcomes of these activities are recorded in either their maths books, folders or shared on Tapestry. There will be support for those children who are not on track and 'Digging Deeper' activities to stretch the children who are quicker at mastering new concepts.

	Intent		**DM / ELG links**	**Implementation**
Autumn Term	**Number**	**Measure, shape and spatial thinking.**		
Just like me!	• Match and sort objects in different ways. • Compare amounts.	• Compare size, mass and capacity. • Exploring pattern.	*Children in Reception:* • Compare numbers. • Continue, copy and create repeating patterns. • Compare length, weight and capacity.	• Range of autumnal loose parts that the children can match and sort in their play. • Counting as part of everyday activities and at least once a day taught. • Book talk – mathematical stories available within play • Using mathematical language (one more than, one less than) • Dice play and patterns readily available • Problem solving opportunities indoors and outdoors for comparing weight, length, capacity • Ordering by size within play (clothes in role play, cups, bowls and so on) • Subitising opportunities within play • Use numicon to explore numeral and quantity • Use 5 and 10 frames within play
It's me 1,2,3!	• Representing 1, 2 and 3 • Comparing 1, 2 and 3 • Composition of 1, 2, and 3	• Circles and triangles • Positional language	*Children in Reception:* • Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Explore the composition of numbers to 3.	
Light and Dark	• Representing numbers to 5 • One more and less	• Shapes with 4 sides • Time	*Children in Reception:* • Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 5. • Begin to recall number bonds for numbers 0-5.	

Spring Term	**Number**	**Measure, shape and spatial thinking.**		
Alive in 5!	Introducing 0 Comparing numbers to 5 Composition of 4 & 5	Comparing Mass (2) Comparing Capacity (2)	*Children in Reception:* • Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 5. • Automatically recall number bonds for numbers 0-5. • Compare length, weight and capacity.	• As above and… • Variety of counting songs to count forwards and backwards to 10 (sometimes starting from different numbers). • Provide estimation opportunities within play. • Use numicon to explore numeral and quantity and pattern (staircase and odds and evens) • Play subitising games • Provide simple problem solving opportunities (muddled up number lines, missing numbers, dropping marbles into a tin –how many) • Model making in large and small ways (including obstacle courses). • Story time discussions – encourage children to ask and answer questions.
Growing 6, 7, 8	6, 7 and 8 Combing 2 amounts Making pairs	Length and height Time	*Children in Reception:* • Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Compare numbers. • Automatically recall number bonds for numbers 0-5 and some to 10. • Compare length, weight and capacity.	
Building 9 & 10	Counting to 9 and 10 Comparing numbers to 10 Bonds to 10	3D shapes Spatial awareness Patterns	*Children in Reception:* • Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0-5 and some to 10. • Select, rotate and manipulate shapes to develop spatial reasoning skills.	

			• Continue, copy and create repeating patterns.	
Summer Term	**Number**	**Spatial Thinking**		
To 20 and beyond	Building numbers beyond 10 Counting patterns beyond 10	Spatial reasoning (1) Match, rotate, manipulate	*ELGS:* *Number* • Have a deep understanding of number to 10, including the composition of each number. • Subitise (recognise quantities without counting) up to 5. • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. *Numerical Patterns* • Verbally count beyond 20, recognising the pattern of the counting system. • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	• As above and… • Number tracks, number lines, 100 squares to show numerical patterns in the number system. • Count beyond 10 in different ways (2s, 5s, 10s) • Provide collections to compare (small/large, more/less) and distribute items equally (sharing) • Provide staircase patterns in numicon to show that the next counting number is the previous number plus one) • Provide problem solving for bonds for 10 (6 are outside the tent, how many are inside?) • Use 10 frames to explore bonds and how many are missing. • Use 5 frames for addition and subtraction facts within play • Compose and decompose shapes - look for patterns (square faces in cubes, two triangles making a square or diamond) • Make patterns with AB, ABB, ABBC rules – making deliberate mistakes for the children to correct.
First, Then, Now	Adding more Taking away	Spatial reasoning (2) Compose and decompose		
Find my pattern	Doubling Sharing and grouping Even and odd	Spatial Reasoning (3) Visualise and Build		
On the move	Deepening Understanding of Patterns and relationships	Spatial Reasoning (4) Mapping		

Statutory EYFS Framework: 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.

Yr 1 Autumn Term	Number
Number: Place Value (within 10)	• Sort, count and represent objects • Count, read and write forwards & backwards from any number 0 to 10 • Count one more / one less • One-to-one correspondence to start to compare groups • Compare groups using language such as equal, more/greater, less/fewer • Introduce <, > and = symbols • Compare numbers • Order groups of objects • Order numbers • Ordinal numbers (1st, 2nd, 3rd …) • The number line