EYFS - Mathematics

Progression of Knowledge and Skills

Reception Aut	Reception Spr	Reception Sum	ELG
			Checkpoint
Li Understand tł Au Selec Compose and decompose shap	Спескропп		
Develop the key skills of counting objects including saying the numbers in order and matching one number name to each item (to 5). Say how many there are after counting - for example, "3, 4 5. There are 5 balls" - to help children appreciate that the last number of the count indicates the total number of the group. This is the cardinal counting principle. Say how many there might be before you count to give a purpose to counting: "I think there are about 4. Shall we count to see?" Count out a smaller number from a larger group (to 5) Sing counting songs and number rhymes and read stories that involve counting. Play games which involve counting. Subitise to 5 for familiar patterns (for example, dice) and random arrangements. Put objects into five frames. Prompt children to subitise first when enumerating groups of up to 4 or 5 objects: "I don't think we need to count those. They are in a square shape so there must be 4." Count to check. Encourage children to show a number of fingers 'all at once', without counting. Match numerals to pictorial representations (to 5) Focus on composition of 2, 3, 4 and 5 Match and sort pictures and objects and explore sorting techniques and rules eg colour, shape, type Identify circles, triangles and 4 sided shapes. Compare size, mass and capacity eg bigger, smaller, heavier, lighter, more, less	Compare length, weight and capacity. Discuss the different ways children might record quantities (for example, scores in games), such as tallies, dots and using numeral cards. Count verbally to 20 Develop skills and concepts introduced in Autumn term with numbers to 10 (including 0). Provide images such as number tracks and calendars showing 2 digit numbers. Compare amounts, starting with a very different number of things. Include groups where the number of items is the same. Use vocabulary: 'more than', 'less than', 'fewer', 'the same as', 'equal to'. Make predictions about what the outcome will be in stories, rhymes and songs to explore '1 more' and '1 less' than a number to 10. Provide 'staircase' patterns which show that the next counting number includes the previous number plus one. Model conceptual subitising: "Well, there are three here and three here, so there must be six." Plan games which involve partitioning and recombining sets. For example, throw 5 beanbags, aiming for a hoop. How many go in and how many don't Compare mass uses a balance. Explore capacity using key vocabulary eg full, empty, nearly full, nearly empty. Explore and compare length and height Order familiar events from their daily routines eg breakfast time, bedtime etc Recognise and name 3D shapes - identify 2D shape in the	Develop number skills and concepts to 20 Help children to learn number bonds through lots of hands- on experiences of partitioning and combining numbers in different contexts, and seeing subitising patterns. Explore addition and subtraction through a range of activities. Play hiding games with a number of objects in a box, under a cloth, in a tent, in a cave, etc.: "6 went in the tent and 3 came out. I wonder how many are still in there?" Intentionally give children the wrong number of things. For example: ask each child to plant 4 seeds then give them 1, 2 or 3. "I've only got 1 seed, I need 3 more." Spot and use opportunities for children to apply number bonds: "There are 5 of us but only 2 clipboards. How many more do we need?" Place objects into a ten frame and talk about how many spaces are filled and unfilled. Explore sharing using the vocabulary fair, equal, same Tell a story about a character distributing snacks unfairly and invite children to make sure everyone has the same. Introduce doubling and halving through games and songs. Model and give the children opportunities to use 2D and 3D shapes in practical situations eg to make a shape picture or a model, giving reasons for their choice of shape. Can I use a cylinder in my model? Which face should I put on the ground? Use positional language to describe and follow instructions for building/placing objects Create maps for familiar settings	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. 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.

Talk about their day and night routine.	Copy, continue and create more complex patterns eg ABBABB		
White Dage Units to be severed	White Rose Units to be covered	White Rose Units to be covered	
Getting to know you (2 weeks - baseline)	Alive in 5 (2 weeks)		
Getting to know you (2 weeks - baseline)		To 20 and beyond (2 weeks)	
• Establish maths through routines (tens frame buses 100 days in	Introduce zero		
school, calendar activities)	• Find 0 to 5	• Build numbers beyond 10 (10-13)	
·····	• Subitise 0 to 5	Continue patterns beyond 10 (10-13)	
	• Represent 0 to 5	• Build numbers beyond 10 (14-20)	
Match, Sort & Compare (2 weeks)		• Continue patterns beyond 10 (14-20)	
	• 1 less	• Verbal counting beyond 20	
Match objects	Composition Concentral subjicing to 5	Verbal counting patterns	
 Match pictures and objects 	Conceptual subtristing to 5		
Identify a set		W	
 Sort objects to a type 	Mass and Canacity (1 week)	How many now: (1 week)	
 Explore sorting techniques 	intervention (1 mont)	Add more	
Create sorting rules	Compare mass	How many did Ladd?	
Compare amounts	Find a balance	Take away	
	Explore capacity	 How many did I take away? 	
Talk about mangung and natterns (2 weeks)		• How many did I take away:	
Tark about measure and patterns (2 weeks)			
Compare size	Growing 6, 7, 8 (2 weeks)	Manipulate, compose and decompose (2 weeks)	
Compare mass	• Find 6 7 and 8		
Compare capacity	 Panrosont 6, 7 and 8 	• Select shapes for a purpose	
 Explore simple patterns 	• Represent 0, 7, and 8	Kotate shapes	
 Copy and continue simple patterns 		 Manipulate snapes Evaluin shape amongomenta 	
Create simple patterns	 Composition of 6.7 and 8 	Explain shape arrangements	
	 Make pairs-odd and even 	Compose snapes Decompose shapes	
It's Me 1, 2, 3 (2 weeks)	 Double to 8 (find a double) 	Conv 2D shape pictures	
	 Double to 8 (make a double) 	 Copy 2D shape pictures Find 2D shapes within 2D shapes 	
• Find 1, 2 and 3	Combine 2 groups	• Find 2D shapes within 5D shapes	
• Subitise 1, 2 and 3	Conceptual subitising	Sharing and grouping (2 weeks)	
• Represent 1, 2 and 3	- · · · · · · · · · · · · · · · · · · ·	Sharing and grouping (2 woods)	
• 1 more		Explore sharing	
• 1 less	Length, Height and Time (1 week)	Sharing	
• Composition of 1, 2 and 3		Explore grouping	
	Explore length	• Grouping	
Circles and triangles (1 week)	Compare length	• Even and odd sharing	
Circles and triangles (1 week)	Explore height	Play with and build doubles	
 Identify and name sincles and triangles 	Compare height		
Compare circles and triangles	Talk about time		
Shapes in the environment	 Order and sequence time 	Visualise, build and map (3 weeks)	
Describe position			
- Deserve position	Building 9 and 10 (3 weeks)	 Identify units of repeating patterns 	
		Create own pattern rules	
1, 2, 3, 4, 5 (2 weeks)	• Find 9 and 10	 Explore own pattern rules 	
	Compare numbers to 10	 Replicate and build scenes and constructions 	
• Find 4 and 5	Kepresent 9 and 10 Geneentuel sublitizing to 10	Visualise from different positions	
• Subitise 4 and 5	Conceptual subtristing to 10	Describe positions	
• Represent 4 and 5	• 1 more	Give instructions to build	
• 1 more	I less Composition to 10	Explore mapping	
• 1 less	Composition to 10 Ponde to 10 (2 parts)	Represent maps with models	
Composition of 4 and 5	Bonds to 10 (2 parts) Make arrangements of 10	Create own maps from familiar places	
Composition of 1-5	 Wrake affailing emetals of 10 Bonds to 10 (3 parts) 	Create own maps and plans from story situations	
	 Doubles to 10 (5 pairs) Doubles to 10 (find a double) 		
	- Doubles to to (thild a double)		

Shapes with 4 sides (1 week)	• Doubles to 10 (make a double)	Make connections (1 week)	
	Explore even and odd		
 Identify and name shapes with 4 sides 		 Deepen understanding 	
 Combine shapes with 4 sides 		 Patterns and relationships 	
 Shapes in the environment 	Explore 3D shapes (2 weeks)		
My day and night			
	 Recognise and name 3D shapes 		
	 Find 2D shapes within 3D shapes 		
	 Use 3D shapes for tasks 		
	 3D shapes in the environment 		
	 Identify more complex patterns 		
	Copy and continue patterns		
	Patterns in the environment		