

## Maths Checkpoints - Reception

Checkpoint	Maths - Numbers	Maths - Numerical Patterns	Shape, Space and Measure
<b>September</b>	Subitise to 3. Represent 1 - 3 on fingers, on a tens frame and with objects.	Join in with number songs, attempting to represent numbers using fingers where appropriate. Recite numbers to 10 or beyond. Demonstrate understanding that we use one number for each item, when counting. Attempt to count objects, actions and sounds. Use and understand the term "more" in practical contexts.	Describe the size or shape of real-life objects using simple mathematical vocabulary, e.g. <i>big/small, round/straight</i> . Time - understand <i>first/next</i> <i>Sorting/matching</i> - sort groups of objects according to different criteria
<b>Christmas</b>	Subitise to 4. Discuss composition of numbers to 4, showing some automatic recall of number facts. Begin to recognise parts within numbers. E.g. Look at 4 buttons and say "I can see a group of 2 and another group of 2"	Recite numbers to 20 confidently. Count back from 10. Demonstrate understanding of the cardinal principle when counting objects. Show accuracy when counting a group of up to 5/10 objects. Use and understand the terms more and fewer/less in practical contexts. Understand the term equal when comparing two groups of objects.	Time - Understand <i>yesterday/today/tomorrow</i> . Recite days of the week. Shape - Identify straight and curved sides on 2D shapes, and flat and curved faces on 3D shape Use shapes to make pictures/models. Measure - use and understand the terms short/tall, large/small. Sequence 4 items according to these criteria.
<b>Easter</b>	Discuss composition of numbers to 4, showing some automatic recall of number facts. Confidently subitise rather than count small groups of objects. Subitise to 5 using familiar concept images (e.g. a tens frame, with dienes and using fingers)	Recite numbers to 20 and back from 20. Count on from a given number to 20 and back from a given number 0 - 10. Show accuracy when counting a group of objects, showing 1 to 1 correspondence & confident	Demonstrate understanding of everyday prepositions - in, on, under, beside, in front, behind. Time - Use and understand <i>before/after</i> Shape - Select, rotate and manipulate shapes to match a picture, fit an outline or create patterns. Pattern - continue a simple AB, ABC pattern

		<p>application of the cardinal principle.</p> <p>Say the number one more/less than a given number 1 - 10.</p> <p>Explore sharing into equal groups in practical contexts, commenting on what they notice.</p>	
<b>EOY incl. ELG</b>	<p>Have a deep understanding of number to 10, including the composition of each number.</p> <p>Subitise (recognise quantities without counting) up to 5.</p> <p>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.</p>	<p>Verbally count beyond 20, recognising the pattern of the counting system.</p> <p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</p> <p>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</p>	<p><b>NO ELG FOR THIS AREA.</b></p> <p>Use everyday language to discuss length, size, height, weight, time, position and capacity. Use this language to make simple observations, e.g. this is heavier than that.</p> <p>Shape - Understand and use correct mathematical language to describe 2D and 3D shapes (e.g. vertices, sides, edges, faces, flat/curved).</p> <p>Shape - Know some common 2D and 3D shapes.</p> <p>Pattern - create, copy and continue a simple pattern</p>
<b>Those working in Greater Depth may...</b>	<p>Be able to “conceptually subitise” to 10 or beyond.</p> <p>Know number bonds to 10 or beyond.</p> <p>Link subtraction and addition in meaningful ways, e.g. when exploring the part-whole model.</p> <p>Make strong links between areas of their learning, e.g. doubling/halving.</p>	<p>Make estimations based on their “number knowledge/sense”, e.g. <i>that number must be greater than 20 because I can see two full tens and a part finished ten.</i></p> <p>Apply their number knowledge to solve problems, e.g. <i>It takes 3 eggs to make a cake so I must need 6 for two cakes.</i></p>	<p>Pattern - create patterns of increasing complexity, e.g. ABCCABCC or spot errors in a given pattern.</p> <p>Shape - confidently discuss the properties of common and irregular 2D and 3D shapes, e.g. giving clues.</p> <p>Make predictions and link their knowledge of number to their work on measures, e.g. <i>The red car weighed 4 cubes and the green one is heavier so it might weigh 6 cubes.</i></p>
<b>Vocabulary</b>	<p>Number, digit, count, subitise, estimate, guess, add, subtract,</p>	<p>Count, pattern, compare, greater than, less than, share, half, halve,</p>	<p>Days of the week, months of the year, second, minute, hour, day, week, month, time, before, after, length, height, weight,</p>

	take-away, more, less, fewer, more than, less than, plus, minus, number bond, part-part-whole, double, half	odd, even, opposite, equal, fair share, estimate, solve	capacity (use comparative language) full, empty, half-full, 2D shape names (up to hexagon) 3D shape names (sphere, cube, cuboid, cylinder, pyramid), big, round, curved, straight, vertex, vertices, apex, side, ,solid, flat, roll, face, measure, prepositions (in, on, next to, underneath, behind, in between, in front etc.)
<b>Skills</b>	Count accurately with 1:1 correspondence Subitise to 5, then 10 and beyond Recognise that numbers can be represented in different ways Recognise that numbers can be made in different ways (part/part/whole) Use ten frames Use objects to represent numbers and explain relationships between numbers	Count to 20, forwards and backwards Add using numbers to 10, Have rapid recall of number bonds to 10 Subtract using numbers to 10 State numbers that are one more or one less than numbers to 10 Share Estimate Solve simple number problems and word problems involving numbers Know doubles facts	Sort objects according to different criteria Recite days of the week Recite months of the year Use basic time language correctly Sequence familiar events Recognise and describe basic 2D and 3D shapes Recognise and create patterns Measure weight, height, length and capacity, using simple measurements Compare weight, height and capacity, using comparative language