



Reception: Counting Skills

<p>Unit 1: Numbers to 5 Unit 7: Numbers to 10 Unit 14: Counting on and counting back Unit 15: Numbers to 20</p>	
<p>Importance of this topic</p>	<p>This builds on children’s ability to count in sequence.</p> <p>It develops their understanding of numbers’ ‘cardinal values’ – how many items the number represents</p> <p>The ‘Counting’ units in Power Maths Reception develop children’s ability to recognise, represent and manipulate numbers to 5 and 10, including identifying 1 more and 1 less and then count to 20.</p>
<p>How this topic develops</p>	<p>Unit 1: Develops the skills of counting, recognizing and manipulating numbers to 5. Visual representations are used to encourage children to subitise.</p> <p>Unit 7: Applies these new skills to numbers to 10.</p> <p>Unit 14: Progresses to manipulating the numbers, using a number track to count on and back.</p> <p>Unit 15 Covers oral counting above 10 and the patterns of the number system.</p>
<p>Structures and representations</p>	<p>Multilink cubes/ counters</p> <p>Multilink cubes provide a physical representation of an amount, which children can handle and move to support their early counting skills. They can be lined up in a row or placed into frames</p> <p>Real-life objects</p> <p>Real-life objects also perform this function, putting numbers into recognisable contexts.</p> <p>Five frames and ten frames</p>

	<p>Five frames and ten frames help children to visualise numbers' cardinal values, and support their understanding of number bonds. They also demonstrate how different arrangements are worth the same amount.</p> <p>These are used with cubes and with real-life objects.</p> <p>Number tracks</p> <p>Number tracks can be used as a reference for numerals, or to aid in counting on and counting back.</p>
<p>Key vocabulary</p>	<p>The key vocabulary used in the 'Counting' units includes the numbers to twenty.</p> <p>Children will also become familiar with terms related to recognition, comparison and manipulation of numbers, and to the equipment they will use.</p> <p>number; how many; compare; same; different; more; less, fewer; largest; smallest; odd one out; order; arrange; group; collections; represent; show; total; altogether; next; after; count on; count forwards; count back; count backwards; method; solutions; five frame; ten frame; cube; counter</p>
<p>Misconceptions and interventions</p>	<p>Counting back incorrectly</p> <p>Children may find counting backwards tricky, missing out numbers or saying them in the wrong order.</p> <p>To assist them, role-play situations in which counting down is necessary, such as the countdown to blowing out birthday candles or to a rocket launch.</p> <p>You could also sing songs such as 'Ten Green Bottles', 'Ten Little Monkeys' or 'Ten Speckled Frogs'.</p> <p>Counting too few or too many</p> <p>Children may count too many or too few, count an object more than once or leave one out.</p> <p>To intervene, encourage them to line up objects in a row and to touch each object as they count or move each item as they count it.</p> <p>Misinterpreting teen numbers</p> <p>Children may struggle with the concept of teen numbers, either by not recognising the idea of ten and then some more, or by reading the digits separately or backwards: for example, reading 14 as 'one four', 'ten four' or 'teen four'.</p>

	<p>To clarify the concept of ten and some more, use pairs of ten frames, asking children to count out cubes or counters to fill the frames.</p> <p>To familiarise children with naming conventions, expose them to counting and singing before introducing the numerals.</p>
Assessing for mastery	<p>Children who have mastered the 'Numbers' topic will recognise the numerals (1-10).</p> <p>They will be able to count forwards and backwards to 10 confidently, and count an irregular set of objects accurately.</p> <p>They will identify one more and one fewer than a given number to 10, using appropriate vocabulary to compare numbers and quantities.</p> <p>They will be able to count verbally up to and beyond 20.</p> <p>They will also be able to use a range of resources confidently, to represent given numbers. To deepen this understanding, ask children to identify which resources make different concepts clearest, and to explain why.</p>