

Number: Early Learning Progression

Key Concept	Importance of Concept	Teaching and Learning Points
<p>Pre-counting The key focus in pre-counting is an understanding of the concepts more, less and the same and an appreciation of how these are related. Children at this stage develop these concepts by comparison and no counting is involved.</p>	<p>This is important because these concepts lay the foundation for children to later develop an understanding of the many ways that numbers are related to each other; for example five is two more than three, and one less than six.</p>	<p>Children often have some concept of more; this needs to be extended and refined. Less is a more difficult concept and understanding can be developed by pairing the terms less and more to help develop an understanding of the relationship between the two.</p>
<p>One-to-one counting The key focus of one-to-one counting is developing children's ability to count. Two skills are needed:</p> <ul style="list-style-type: none"> • ability to say the standard list of counting words in order • ability to match each spoken number with one and only one object 	<p>Counting is important because the <i>meaning</i> attached to counting is the key conceptual idea on which all other number concepts are based.</p>	<p>Children have often learnt the counting sequence as a rote procedure. They need to learn the meaning of counting by using counting skills in a variety of meaningful situations. Start with counting small numbers, up to five objects.</p> <p>Once children can count reliably their knowledge of the number sequence can be extended to count both forwards and backwards, from any given number.</p>
<p>Counting sets The key focus of counting sets is developing children's understanding of cardinality. This means that children understand when you count the items in a set, the last number counted tells the size of that set. They also know that the number in a set will remain constant as long as no items are added to the set, or taken from the set.</p>	<p>Cardinality is important because it allows numbers to be used to describe and compare sets. This allows sets of items to be combined (addition) and separated (subtraction).</p>	<p>Children develop an understanding of cardinality by counting a variety of objects into different sized sets. Counting the same set several times and in a different order develops children's understanding that the number in a set stays the same unless items are added or taken away.</p> <p>The ability to recognise and write numerals are important skills to develop alongside counting.</p>
<p>Counting from one to solve number problems The key focus here is counting objects to solve addition and subtraction problems.</p>	<p>Using counting to solve number problems shows children that counting can be used meaningfully in a variety of situations. This helps them</p>	<p>Encourage children to count a wide variety of concrete materials to solve number problems. Start by joining small sets, with a total of five</p>

<p>Children will need to use materials such as buttons, plastic animals, or whatever they may be playing with, to keep track of their counting. For example, children will combine 3 and 2 by first counting out “1,2,3” for the first set, then “1,2” for the second set, then physically join the sets and counting them all “1,2,3,4,5.”</p>	<p>understand and appreciate counting as more than a rote procedure.</p> <p>Using counting to combine and separate groups of objects develops children's understanding of the operations of addition and subtraction. Children come to understand that when groups are combined the count gets bigger, and when groups are separated the count gets smaller.</p>	<p>and then ten items.</p>
<p>Counting on to solve number problems Once children understand cardinality and the forward and backward number sequences they can count on or back to solve number problems. For example 5 and 3 can be added by counting on from the largest number: “5.....6,7,8”.</p>		<p>Encourage children to count on to solve number problems by taking the focus away from counting the items in the first set. Use comments which encourage children to count on from the largest number.</p>