

Closing the Gap with Numicon Kit is designed for teaching basic number ideas to pupils of any age who are having difficulty with understanding. This table shows how the Closing the Gap Activities correlate to the P-Level Descriptions.

Closing the Gap with Numicon Activity	P-level Description
<p><b>1a Getting to know the Numicon Shapes</b> Aim: To explore freely the Numicon Shapes.</p>	<p><b>Calculations</b> <b>Addition and Subtraction</b> P4 Aware of cause and effect in familiar mathematical activities <b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P4 Show awareness of changes in shape, position or quantity <b>Problems involving 'real life' money or measures</b> P4 Anticipate, follow and join in mathematical activities when given a contextual clue <b>Measures, shape and space</b> <b>Position and direction</b> P4 Demonstrate interest in position and the relationship between objects</p>
<p><b>Extend to</b></p>	<p><b>Measures, shape and space</b> <b>Shape and space</b> P6 Manipulate three-dimensional shapes P7 Start to pick out named shapes from a collection <b>Position and Direction</b> P5 Explore the position of objects P6 Show understanding of words, signs and symbols that describe positions</p>
<p><b>Counting Activities A</b> Aims: To learn to recite the number names in order (the count sequence). To begin to learn to count one to one.</p> <p><b>Counting Activities B</b> Aims: To learn to count 1 to one. To begin to use 'more' and 'fewer' or 'less' when comparing number values. To understand that the last number of the count tells you its size (cardinal value).</p> <p><b>See also below for details on aspects of counting in:</b> 5b Getting to Know the Numicon Shapes and Patterns 6a Giving the Numicon Shapes their Number Names 6b Knowing the Number Names of the Numicon Shapes 7a Ordering the Shapes and Numerals</p>	<p><b>Numbers and the number system</b> <b>Counting, properties of numbers and number sequences</b> P4 Show an interest in number activities and counting P5 Respond to and join in with familiar number rhymes, stories, songs and games P5 Indicate one or two P6 Join in with new number rhymes, songs, stories and games with some assistance or encouragement P6 Join in rote counting up to 5 and use numbers to 5 in familiar activities and games P6 Demonstrate an understanding of one-to-one correspondence in a range of contexts P6 Count reliably to 3 and make sets of up to three objects P7 Join in with rote counting to 10 P7 Count at least five objects reliably P8 Join in with rote counting to beyond P8 Continue the rote count onwards from a given small number P8 Begin to count up to ten objects <b>R Say and use number names in order in familiar contexts</b> <b>R Count reliably up to ten everyday objects</b></p>

<p>7b Knowing the Numicon Patterns and Numerals 8a Knowing the Patterns and Numerals 8b Using the Numicon Patterns</p>	<p><b>Place value and ordering</b> P4 Show an interest in number activities and counting P5 Demonstrate awareness of contrasting quantities by making groups of objects with help P6 Demonstrate their understanding of one-to-one correspondence in a range of contexts P7 Begin to recognise differences in quantity P7 Begin to recognise numerals from 1 to 5 and to understand that each represents a constant number or amount P8 Begin to recognise numerals from 1 to 9 and relate them to sets of objects P8 Begin to use ordinal numbers (first, second or third) when describing the position of objects people or events</p> <p><b>Solving Problems</b> <b>Problems involving 'real life' money or measures</b> P5 Make sets that have the same small number of objects in each</p>
<p><b>1b Getting to know the Numicon Shapes</b> Aim: To learn to match Numicon Shapes by colour and shape. <b>2a Getting to know the Numicon Shapes</b> Aims: To match Numicon Shapes to coloured pictures of the Shapes.</p>	<p><b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P5 With support, match objects or pictures <b>Problems involving 'real life' money or measures</b> P5 Begin to sort sets of objects according to a single attribute</p>
<p><b>Closing the Gap Pattern and Sequence A</b> Aims: To learn to copy, continue and devise repeating patterns.</p>	<p><b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P6 Copy simple patterns or sequences</p>
<p><b>2b Getting to know the Numicon Shapes</b> Aims: To understand and use the language 'bigger' with Numicon <b>3a Getting to know the Numicon Shapes</b> Aims: To understand and use the language 'smaller' with Numicon</p>	<p><b>Numbers and the number system</b> <b>Place value and ordering</b> P5 Demonstrate awareness of contrasting quantities by making groups of objects with help</p> <p><b>Measures, shape and space</b> <b>Measures</b> P5 Compare the overall size of one object with that of another where there is a marked difference P5 Find big and small objects on request P6 Compare the overall size of one object with that of another where the difference is not great</p>
<p><b>3b Getting to know the Numicon Shapes</b> Aims: To use the language of comparative size with Numicon</p>	<p><b>Measures, shape and space</b> <b>Measures</b> P5 Compare the overall size of one object with that of another where there is a marked difference P6 Compare the overall size of one object with that of another where the difference is not great P7 Use familiar words to compare sizes and quantities</p>

<p><b>4a Learning to put the Numicon Shapes in order</b> Aims: To be able to put Numicon Shapes in order of size.</p> <p><b>4b Learning to put the Numicon Shapes in order</b> Aims: To confidently and securely order Numicon Shapes.</p>	<p><b>Numbers and the number system</b> <b>Place value and ordering</b> P6 Demonstrate an understanding of the concept of more/fewer</p> <p><b>Measures, shape and space</b> <b>Position and direction</b> P6 Search for objects not found in their usual place, demonstrating an understanding of object permanence P6 Show understanding of words, signs and symbols that describe positions P7 Use familiar words to describe position</p> <p><b>Measures</b> P6 Show awareness of vocabulary such as 'more' and 'less', in practical situations P6 Compare the overall size of one object with that of another where the difference is not great P7 Use familiar words to compare sizes and quantities</p>
<p><b>5a Getting to know the Numicon Shapes and patterns</b> Aims: To match Numicon Shapes to: grey pictures of the Shapes, to outlines of the Shapes, and to small representations of the Numicon patterns as shown on the Spinner Overlays.</p>	<p><b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P6 Copy simple patterns or sequences Shape and space P6 Manipulate three-dimensional shapes P8 Describe shapes in simple models, pictures and patterns</p> <p><b>Problems involving 'real life' money or measures</b> P6 Begin to identify when an object is different and does not belong to given categories P7 Identify when an object is different and does not belong to a given familiar category</p>
<p><b>5b Getting to know the Numicon Shapes and patterns</b> Aim: To learn the pattern of the Numicon Shapes</p>	<p><b>Numbers and the number system</b> <b>Place value and ordering</b> P5 Demonstrate awareness of contrasting quantities by making groups of objects with help</p> <p><b>Calculations</b> <b>Addition and Subtraction</b> P6 Demonstrate their understanding of one-to-one correspondence in a range of contexts</p> <p><b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P6 Copy simple patterns or sequences</p>

<p><b>Pattern Activities A</b> Aims: To learn to copy, continue and devise repeating patterns</p> <p><b>Pattern Activities B</b> Aims: To develop visual spatial perception and organizational skills. To develop understanding of direction.</p>	<p><b>Solving problems</b> <b>Reasoning about numbers or shapes</b> P6 Copy simple patterns or sequences P8 Recognise, describe and recreate simple repeating patterns and sequences</p>
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<p><b>6a Giving the Shapes their number names</b> Aims: To give number names to the Numicon Shapes and to count objects one-to-one</p> <p><b>6b Knowing the number names of the Numicon Shapes</b> Aims: To call the Numicon Shapes by their number names confidently when using them in different situations</p>	<p><b>Solving problems</b> <b>Reasoning about numbers and shapes</b> P4 Be aware of cause and effect in familiar mathematical activities <b>Numbers and the number system</b> <b>Counting, properties of numbers and number sequences</b> P6 Demonstrate an understanding of one-to-one correspondence in a range of contexts P7 Count at least five objects reliably P8 Continue the rote count onwards from a given small number <b>Place value and ordering</b> P6 Demonstrate an understanding of the concept of more/fewer P6 Demonstrate an understanding of one-to-one correspondence in a range of contexts <b>Calculations</b> <b>Addition and Subtraction</b> P7 Respond appropriately to key vocabulary and questions, for example 'How many?' P7 Begin to recognise differences in quantity <b>Solving problems</b> <b>Problems involving 'real life' money or measures</b> P7 Respond appropriately to key vocabulary and questions, e.g. 'How many?' <b>Measures, shape and space</b> <b>Measures</b> P6 Show awareness of vocabulary such as 'more' and 'less', in practical situations</p>
<p><b>7a Ordering the Shapes and Numerals</b> Aims: To match numerals with Numicon Shapes in order</p>	<p><b>Numbers and the number system</b> <b>Counting, properties of numbers and number sequences</b> P8 Begin to count up to ten objects <b>Place value and ordering</b> P7 Begin to recognise numerals from 1 to 5 and to understand that each represents a constant number or amount P7 Begin to recognise differences in quantity P8 Begin to recognise numerals from 1 to 9 and relate them to sets of objects</p>
<p><b>7b Moving beyond counting</b> Aims: To practice connecting Numicon Shapes, number names and numerals without counting</p> <p><b>8a Knowing the Shapes and Numerals</b> Aims: To confidently recognise Numicon Shapes and patterns, use number names and recognise numerals</p>	<p><b>Numbers and the number system</b> <b>Place value and ordering</b> <b>R Recognise numerals 1-9 (consistently and with confidence) then 0 to 10</b></p>
<p><b>8b Using the Numicon patterns</b> Aims: To prepare pupils for place value. To see that arranging objects into patterns or grouping is an efficient way to find out 'how many'.</p>	<p><b>Numbers and the number system</b> <b>Counting, properties of numbers and number sequences</b> P8 Estimate a small number, and check by counting <b>Solving problems</b> <b>Problems involving 'real life', money or measures</b> P8 Begin to make simple estimates such as how many cubes will fit in a box</p>

<p><b>9a Knowing the Shapes and Numerals</b>  Aims: To use mental imagery of the Numicon patterns.  To develop mathematical reasoning.  To begin to use the language for addition and subtraction.</p>	<p><b>Numbers and the number system</b>  <b>Counting, properties of numbers and number sequences</b>  P8 Estimate a small number, and check by counting  <b>Calculations</b>  <b>Addition and Subtraction</b>  P8 In practical situations add one to or take one away from a number of objects  <b>Solving problems</b>  <b>Problems involving 'real life', money or measures</b>  P7 Identify when an object is different and does not belong to a given familiar category  P8 Begin to use their developing mathematical understanding of counting to solve simple problems encountered in play, games or other work</p>
<p><b>9b Addition</b>  Aims: To begin to relate addition to combining two or more Shapes and to use the language of addition.  To know that addition is used to answer 'How many altogether?'</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 Respond appropriately to key vocabulary and questions, for example 'How many?'  P7 Begin to recognise differences in quantity</p>
<p><b>10a Addition</b>  Aims: To relate addition to combining two or more Shapes and to use the language of addition.  To use mathematical reasoning</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 Respond appropriately to key vocabulary and questions, for example 'How many?'  P7 Begin to recognise differences in quantity</p>
<p><b>10b Addition</b>  Aims: To find 1 more than a number from 1-9.  To introduce the increase structure of addition.</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 In practical situations, respond to 'add one' and 'take one'  P8 In practical situations add one or take one away from a number of objects</p>
<p><b>11a Addition</b>  Aims: To show doubles as special combinations of two numbers</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 Respond appropriately to key vocabulary and questions, for example 'How many?'  P7 Begin to recognise differences in quantity</p>
<p><b>11b Subtraction as taking away</b>  Aims: To relate subtraction to taking away, using the vocabulary involved in subtraction. To know that subtraction is used to answer 'How many left?'</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 In practical situations, respond to 'add one' and 'take one'  P8 In practical situations add one or take one away from a number of objects</p>
<p><b>12a Subtraction</b>  Aims: To find 1 fewer/less than any number from 1-10.  To meet the decrease structure of subtraction.</p>	<p><b>Calculations</b>  <b>Addition and Subtraction</b>  P7 In practical situations, respond to 'add one' and 'take one'  P8 In practical situations add one or take one away from a number of objects</p>

<p><b>I2b Subtraction as difference</b>  Aims: To begin to understand the comparison and difference structure of subtraction</p>	<p><b>Numbers and the number system</b>  <b>Place value and ordering</b>  P8 Compare two given numbers of objects saying which is more and which is less  <b>R Use language such as more or less, greater or smaller, to compare two numbers</b></p>
<p><b>I3a Subtraction</b>  Aims: To learn to use the language 'How many more?' and 'How many fewer/less?'  To meet the inverse of addition structure of subtraction.</p>	<p><b>Numbers and the number system</b>  <b>Place value and ordering</b>  P8 Compare two given numbers of objects saying which is more and which is less  <b>R Use language such as more or less, greater or smaller, to compare two numbers</b></p>
<p><b>I3b Reasoning about numbers</b>  Aims: To begin to reason logically about numbers.  To understand <i>bigger</i> and <i>smaller</i> in the context of numbers</p>	<p><b>Solving problems</b>  <b>Reasoning about numbers and shapes</b>  P7 Identify when an object is different and does not belong to a given familiar category  <b>Problems in solving 'real life', money or measures</b>  P7 Complete a range of classification activities using given criteria  P7 Identify when an object is different and does not belong to a given familiar category.</p>