



## Progression in Mathematics: Number and Place Value

| Concept         | YR       | Nursery and EYFS  | Year 1 and Year 2  | Year 3 and Year 4                                    | Year 5 and Year 6  |
|-----------------|----------|--|---|---|---|
| <b>Counting</b> | Counting | recognises numbers 1-5   | count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number      | count from 0 in multiples of 4,8,50 and 100; find 10 or 100 more or less than a given number<br>count in multiples of 6,7,9,25 and 1000 | count or forwards or backwards in steps of powers of 10 for any given number up to 1 000 000          |
|                 |          | counts up to 3 or 4 objects  | count in multiples of twos, fives and tens  | count backwards through zero to include negative numbers  | count forwards and backwards with positive and negative whole numbers; including through zero         |
|                 |          | counts actions or objects  | count in steps of 2,3 and 5 from 0 and in tens from any number, forward and backward                  |   |   |
|                 |          | counts objects to 10 and beginning to count beyond 10  |   |   |   |
|                 |          | count with reliability with numbers from 1-20  |   |   |   |
|                 |          | place numbers in order and say which number is one more or one less than a given number            |   |   |   |

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| <p style="text-align: center;"><b>Represent</b></p> | <p style="text-align: center;">Represent</p> | <p>Show 'finger numbers' up to 5</p> <p>link numerals and amounts</p> <p>experiment with their own symbols and marks as well as numerals</p> | <p>identify and represent numbers using objects and pictorial representations</p> <p>read and write numbers from 1-20 in numerals and words</p> <p>read and write numbers to 100 in numerals</p> <p>read and write numbers to at least 100 in numerals and in words</p> <p>identify, represent and estimate numbers using different representations including the number line</p> | <p>identify, represent and estimate numbers using different representations</p> <p>read and write numbers up to 1000 in numerals and in words</p> <p>identify, represent and estimate numbers using different representations</p> <p>read Roman numerals to 100 (1 to C) and know that over time, the numeral system changed to include the concept of the zero and place value</p> | <p>read, write, (order and compare) numbers to at least 1000 000 and determine the value of each digit.</p> <p>read Roman numerals to 1000 (M)<br/>And recognise years written in Roman numerals</p> <p>read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit</p> |
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| <p><b>Use PV and Compare</b></p> | <p>Use PV and Compare</p> | <p>estimates how many objects they can see and then checks by counting them</p> <p>finds the total number of items in two groups by counting all of them</p> <p>says the number that is one more /one less from a group of 5 objects ,then 10</p> <p>estimates how many objects they can see and then checks by counting them</p> <p>finds the total number of items in two groups by counting all of them</p> <p>says the number that is one more /one less from a group of 5 objects ,then 10</p> | <p>given a number, identify one more and one less</p> <p>recognise the place value of each digit in a two-digit number(tens, ones)</p> <p>compare and order numbers from 0 up to 100;use &lt; &gt; and=</p> <p>use place value and number facts to solve problems</p> | <p>recognise the place value of each digit in a 3 digit number (hundred,tens,ones)</p> <p>compare and order numbers up to 1000</p> <p>find 1000 more or less than a given number</p> <p>recognise the place value of each digit in a 4 digit number ( thousands, hundreds, tens and ones)</p> <p>order and compare numbers beyond 1000</p> | <p>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p> <p>read, write, order and compare numbers to at least 10.000 000 and determine the value of each digit</p> |
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| <b>Problems Solving and Rounding</b> | Problems and Rounding |  |  | solve number problems and practical problems involving these ideas<br>round any number to the nearest 10, 100 or 1000<br><br>solve number and practical problems that involve all of the above and with increasingly large positive numbers | round up any number to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000<br>solve number and practical problems that involve all of the above<br>round any whole number to a required degree of accuracy<br><br>use negative numbers in context, and calculate intervals across zero |
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