



Progression in Mental Calculations

	Year 1	Year 2
<u>Rapid Recall</u>	<ul style="list-style-type: none"> - All pairs of number with a total of 10 e.g. 3 +7 - Addition and subtraction facts for all numbers to at least 5 - Doubles of all numbers to at least 10 e.g. 7+7 - Multiples of 2, 5, and 10 to the tenth multiple 	<ul style="list-style-type: none"> - Addition and subtraction facts for all number to at least 10 - All pairs of number with a total to 20 e.g. 13+7 - All pairs of multiples of 10 with a total up to 100 e.g. 30+70 - Multiplication facts for the 2, 5, 10 times tables and corresponding division facts - Doubles of all number to 20 and corresponding halves
<u>Mental Strategies</u> <i>Children should be able to use the following strategies, as appropriate, for mental calculations</i>	<ul style="list-style-type: none"> - Count on or back in ones - Recorder numbers in a calculation - Begin to bridge through 10 and later 20 when adding a single-digit number - Use number facts and place value to add or subtract pairs of single-digit numbers - Add 9 single-digit numbers by adding 10 then subtracting 1 - Identify near doubles using doubles already known - Use patterns of similar calculations 	<ul style="list-style-type: none"> - Count on or back in tens or ones - Find a small difference by counting up from the smaller to the larger number - Reorder numbers in a calculation - Add three small number by putting the largest number first and/or finding a pair totalling 10 - Partition additions into tens and units then recombine - Bridge through 10 and 20 - Use know facts and place value to add or subtract pairs of numbers - Partition in '5 and a bit' when adding 6, 7, 8 or 9 - Add or subtract 9, 19, 11 or 21 by rounding and compensating - Identifying near doubles - Use patterns of similar calculations - Use the relationship between addition/subtraction - Use knowledge of number facts and place value to multiply or divide by 2, 5 or 10 - Use doubles and halves and halving as the inverse or doubling
<u>Mental Calculations</u> <i>Children should be able to calculate mentally</i>	<ul style="list-style-type: none"> - Add or subtract a single-digit to or from a single-digit, without crossing 10 e.g. 4+5, 8-3 - Add or subtract a single-digit to or from 10 - Add or subtract a single-digit to or from a 'teens' number, without crossing 20 or 10 e.g. 13+5, 17-3 - Doubles of all number to 10 e.g. 8+8, double 6 	<ul style="list-style-type: none"> - Add or subtract any single-digit to or from any two-digit number, without crossing the tens boundary e.g. 62+4, 38-7 - Add or subtract any single digit to or from a multiple of 10 e.g. 60+5, 80-7 - Add or subtract any 'teens' number to any two-digit number without crossing the tens boundary e.g. 23+14, 48-13 - Find what must be added to any two-digit multiple of 10 to make 100 e.g. 70+ ? = 100 - Add or subtract a multiple of 10 to or from any two-digit number, without crossing 100 e.g. 47+30, 82-50 - Subtract any two digit number from any two-digit number when the difference is less than 10, e.g. 78-71 or 52-48 - Doubles of all numbers to at least 15 - Double any multiple of 5 up to 50 e.g. double 35 - Halve any multiple of 10 up to 100 e.g. halve 50

