

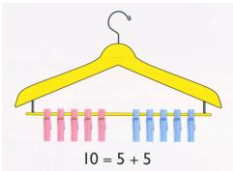


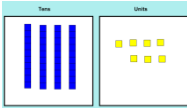
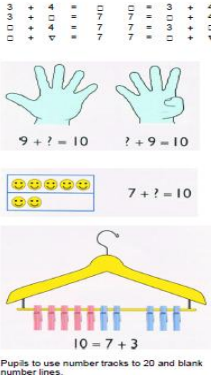
Maths Calculation – Addition

Foundation Stage

<p>Foundation Stage Curriculum</p>	<ul style="list-style-type: none"> • MN14 Recognise some numerals of personal significance • MN15 Recognise numerals 1 to 5 • MN16 Count up to three or four objects by saying one number name for each item • MN17 Count actions or objects which cannot be moved • MN18 Count objects to 10 and begin to count beyond 10 • MN19 Count out up to six objects from a larger group • MN20 Select the correct numeral to represent 1 to 5, then 1 to 10 objects • MN21 Count an irregular arrangement of up to ten objects • MN22 Estimate how many objects they can see and check by counting them • MN23 Use the language of 'more' and 'fewer' to compare two sets of objects • MN24 Find the total number of items in two groups by counting all of them • MN25 Say the number that is one more than a given number • MN26 Find one more or one less from a group of up to five objects, then ten objects • MN27 In practical activities and discussions, begin to use the vocabulary involved in adding and subtracting • MN28 Record using marks that they can interpret and explain • MN29 Begin to identify own mathematical problems based on own interests and fascinations <p>Early Learning Goal</p> <p>Count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given numbers. Use quantities and objects, add and subtract two single-digit numbers and count on or back to find the answer. Solve problems including doubling, halving and sharing.</p>
<p>Mental</p>	<p>Counting forwards and backwards to 20 Counting using 1 to 1 correspondence</p> <div style="text-align: right;">  </div>
<p>Written</p>	<p> $5 + 3 =$ $6 + 2 =$ $7 + ? = 10$ </p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>..... + ... =</p> <p>6 + 2</p> <p>I IIII II</p> </div> <div style="border: 1px solid black; padding: 5px; margin-right: 20px;">  </div> <div style="margin-right: 20px;"> <p>7 + ? = 10</p> </div> <div style="text-align: center;">  <p>10 = 5 + 5</p> </div> </div> <p>Number bonds to 10 using pictures/objects</p>
<p>Underlying Skills</p>	<p>Counting 1:1 Understanding of more Writing numerals – numbers to 20 Teen numbers e.g. 13 = 1 ten and 3 units (Support with bundles of straws in tens)</p>
<p>Vocabulary</p>	<p>Number names Add, plus, altogether, equals, more total</p>

Maths Calculation – Addition

Key Stage 1

	Year 1	Year 2
Mental	<p>Add 1 digit and 2 digit numbers to 20 including zero e.g. $7 + 5 = 12$, $13 + 4 = 17$</p> <p>Read, write and interpret mathematical statements involving addition, subtractions and equals – numbers to 20 including zero</p> <p>(e.g. 7 in your head and then add five – counting 8, 9, 10, 11, 12 on fingers)</p> <p>Represent and use number bonds and related subtraction facts within 20 e.g. $15 + 1 = 16$, $14 + 2 = 16$</p>	<p>Recall and use addition to 20 fluently and derive related facts up to 100</p> <p>$1 + 9 = 10$ $10 + 90 + 100$</p> <p>Add numbers using concrete objects and pictorial representations –</p> <ul style="list-style-type: none"> • A 2 digit number and ones • A 2 digit number and tens • Two 2 digit number • Adding three 1 digit numbers <p>e.g. $12 + 23 =$ $10 + 20 = 30$ and $2 + 3 = 5$ $30 + 5 = 35$</p> <p>Use tens and units – counting units first</p>  <p>Know fact families – e.g. $70 + 30 + 100$, $30 + 70 = 100$, $100 - 30 = 70$, $100 - 70 = 30$</p>
Written	<p>Read, write and interpret mathematical statements involving addition</p> <p>e.g. $12 + 7 =$ Start by counting on one at a time on a number line then show this as one jump</p>  <p style="font-size: small;">Pupils to use number tracks to 20 and blank number lines.</p>	<p>Vertical addition – remember to add units first:</p> $\begin{array}{r} 35 \\ +22 \\ \hline 07 \\ \hline 50 \\ \hline 57 \end{array}$ $\begin{array}{r} 35 \\ +27 \\ \hline 12 \\ \hline 50 \\ \hline 62 \end{array}$
Underlying Skills	<ul style="list-style-type: none"> • Counting forwards and back in steps of 1 and 10 • Finding one more than a number • Finding pairs of numbers that add to ten (number bonds) • Understand addition can be done in any order • Partitioning • Use counting on to add multiples of 10 – e.g. $20 + 10$, $20 + 10$ 	<ul style="list-style-type: none"> • Mental recall of number bonds • Use near doubles • Understand that numbers can be partitioned in different ways • Being able to add multiples of 10 • Instant recall of addition facts for number to 10 • Being able to add teen numbers to multiples of 10 mentally
Vocabulary	Put together, add, altogether, total, take away, distance between, difference between, more than, less than.	Tens, units, ones, stands for, represents, place value, partition

Maths Calculation – Addition

Lower Key Stage 2

	Year 3	Year 4
Mental	Add numbers mentally including <ul style="list-style-type: none"> • A 3 digit number and ones • A 3 digit number and tens • A 3 digit number and hundreds e.g. $365 + 4 =$ $325 + 40 =$ $345 + 400 =$	See Year 3
Written	Add numbers with 3 digits using formal written methods of columnar addition. Develop using place value apparatus $\begin{array}{r} \text{T U} \\ 35 \\ +27 \\ \hline \underline{62} \\ 1 \end{array}$ $\begin{array}{r} \text{HTU} \\ 365 \\ +123 \\ \hline 008 \\ 080 \\ \hline \underline{400} \\ 488 \end{array} \quad \text{Progressing to} \quad \begin{array}{r} \text{HTU} \\ 365 \\ +187 \\ \hline \underline{552} \\ 11 \end{array}$ Use apparatus to support understanding. Use place holders where necessary – especially when adding larger numbers and decimals.	Add numbers with up to 4 digits using the formal written methods of columnar addition e.g. $\begin{array}{r} \text{Th H T U} \\ 3247 \\ +1721 \\ \hline \underline{4968} \end{array}$
Underlying Skills	<ul style="list-style-type: none"> • Link counting with adding • Partitioning 	
Vocabulary	Thousands, hundreds, decimals, decimal place, tenths, hundredths, position, carry.	

Maths Calculation – Addition

Upper Key Stage 2

	Year 5	Year 6
Mental	Add numbers mentally with increasingly large numbers	Perform mental calculations including with mixed operations and large numbers
Written	<p>Add whole numbers with more than 4 digits, including using formal written methods – columnar addition</p> <p>Include decimals - money and measurement contexts</p> $\begin{array}{r} 6.73 \\ + 3.24 \\ \hline 9.97 \end{array}$ $\begin{array}{r} 72.36 \\ + 6.293 \\ \hline 78.653 \\ 1 \end{array}$ $\begin{array}{r} 6.76 \\ +4.55 \\ \hline 11.31 \\ 1 \quad 1 \end{array}$ <p>Use place holders where necessary – especially when adding larger numbers and decimals.</p>	Use knowledge of the order of operations to carry out calculations involving all four operations
Underlying Skills	Application of skills in money and measurement problems	Same as Year 5
Vocabulary		