

Number: Addition and Subtraction



| | NUMBER BONDS | | | | | | | |
|----------------------------|--|------------------------|-----------------------|----------------------------|------------------------------|--|--|--|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | | | |
| represent and use | recall and use addition and | Revision of work from | Revision of work from | Revision of work from | Revision of work from | | | |
| number bonds and | subtraction facts to 20 | previous years | previous years | previous years | previous years | | | |
| related subtraction facts | fluently, and derive and | | | | | | | |
| within 20 | use related facts up to 100 | | | | | | | |
| MENTAL CALCULATION | | | | | | | | |
| add and subtract one- | add and subtract numbers | add and subtract | Revision of work from | add and subtract numbers | perform mental | | | |
| digit and two-digit | using concrete objects, | numbers mentally, | Year 3 | mentally with increasingly | calculations, including with | | | |
| numbers to 20, including | pictorial representations, | including: | | large numbers | mixed operations and large | | | |
| zero | and mentally, including: | * a three-digit number | | | numbers | | | |
| | * a two-digit number and | and ones | | | | | | |
| | ones | * a three-digit number | | | | | | |
| | * a two-digit number and | and tens | | | | | | |
| | tens | * a three-digit number | | | | | | |
| | * two two-digit numbers | and hundreds | | | | | | |
| | * adding three one-digit | | | | | | | |
| | numbers | | | | | | | |
| read, write and interpret | show that addition of two | Revision of work from | Revision of work from | Revision of work from | use their knowledge of the | | | |
| mathematical statements | numbers can be done in | Year 2 | previous years | previous years | order of operations to | | | |
| involving addition (+), | any order (commutative) | | | | carry out calculations | | | |
| subtraction (-) and equals | and subtraction of one | | | | involving the four | | | |
| (=) signs | number from another | | | | operations | | | |
| (appears also in Written | cannot | | | | | | | |
| Methods) | | | | | | | | |



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| WRITTEN METHODS | | | | | | | | |
|---|---|--|--|--|---|--|--|--|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | | | |
| read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation) | Revision of work from Year 1 | add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate | add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) | Revision of work from Year 5 | | | |
| | INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS | | | | | | | |
| | recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. | estimate the answer to a calculation and use inverse operations to check answers | estimate and use inverse operations to check answers to a calculation | use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy | use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. | | | |



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| PROBLEM SOLVING | | | | | | | | |
|--|--|---|--|--|---|--|--|--|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | | | |
| solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = \square - 9 | solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement) | solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division | | | |