Number: Addition and Subtraction



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









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







