|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Addition | Given a number, identify one more. <br> Read, write and interpret mathematical statements involving addition (+) and equals (=) sign. <br> Add one-digit and twodigit numbers within 20, including zero. <br> Solve missing number problems, e.g. $10+?=16$ <br> Represent and use number bonds and related subtraction facts within 20. | Add numbers using concrete objects, pictorial representations and mentally including: <br> - Two-digit number and ones. <br> - Two-digit number and tens. <br> - Two, twodigit numbers. <br> - Three onedigit numbers. <br> Show that addition of two numbers can be done in any order (commutative). <br> Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. | Add numbers with up to 3 digits, using a formal written method of columnar addition. <br> Solve problems, including missing number problems. | Add numbers with up to four digits using the formal written method of columnar addition where appropriate. <br> Solve addition and subtraction two-step problems in context deciding which operations and methods to use and why. | Add numbers with more than four digits using the formal written method of columnar addition. <br> Solve addition and subtraction multistep problems in context deciding which operations and methods to use and why. | Solve addition multi-step problems in context, deciding which methods to use and why. <br> Solve addition and subtraction multi-step problems in context deciding which operations and methods to use and why. |


| Subtraction | Given a number, identify one less. <br> Read, write and interpret mathematical statements involving subtraction (-) and equals (=) sign. <br> Subtract one-digit and two-digit numbers within 20 , including zero. <br> Solve missing number problems, e.g. $20-?=16$ <br> Represent and use number bonds and related subtraction facts within 20. | Subtract numbers using concrete objects, pictorial representations and mentally including: <br> - Two-digit number and ones. <br> - Two-digit number and tens. <br> - Two, twodigit numbers. <br> - Three onedigit numbers. <br> Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. <br> Show that subtraction of one number from another is not commutative. | Subtract numbers with up to 3 digits, using a formal written method of columnar subtraction. <br> Solve problems, including missing number problems. | Subtract numbers with up to four digits using the formal written method of columnar subtraction where appropriate. <br> Solve addition and subtraction two-step problems in context deciding which operations and methods to use and why. | Subtract numbers with more than four digits using the formal written method of columnar subtraction. <br> Solve addition and subtraction multistep problems in context deciding which operations and methods to use and why. | Solve subtraction multi-step problems in context, deciding which methods to use and why. <br> Solve addition and subtraction multi-step problems in context deciding which operations and methods to use and why. |
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| Multiplication | Solve one-step problems involving multiplication. <br> Count in multiples of 2,5 and 10 . | Recall and use multiplication facts for the 2,5 and 10 multiplication tables. <br> Calculate mathematical statements for multiplication tables and write them using the multiplication ( x ) and equals (=) signs. <br> Solve problems involving multiplication, including problems in context. <br> Show that multiplication of numbers is commutative. | Recall and use multiplication facts for the 3, 4 and 8 multiplication tables. <br> Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for 2-digit numbers multiplied by one digit numbers, progressing to a formal written method. <br> Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to $m$ objects. | Recall <br> multiplication facts for multiplication tables up to 12 $\times 12$. <br> Multiply by 2 digit and 3 digit numbers by a 1 digit number using formal written methods. <br> Solve <br> problems <br> involving <br> multiplying <br> and adding, <br> including using <br> the <br> distributive <br> law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondenc e problems such as n object are connected to m objects. | Multiply numbers up to four digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers. <br> Multiply whole numbers and those involving decimals by 10,100 and 1000. | Multiply multidigit numbers (including decimals) up to 4 digits by two-digit whole numbers. |
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