

# Year 7 Foundation Topic Overview - Spring Term



## Spring 1 - Add, Subtract, Multiply and Divide

| Unit  | Topic  | MathsWatch Video     |                      |
|---|--|----------------------|----------------------|
| Problems with Addition and Subtraction            | Use formal methods for addition of integers                  | <a href="#">N3b</a>  | <a href="#">N13a</a> |
|   | Use formal methods for addition of decimals                  | <a href="#">N13b</a> |                      |
|   | Use formal methods for subtraction of integers               | <a href="#">N4b</a>  | <a href="#">N14a</a> |
|   | Use formal methods for subtraction of decimals               | <a href="#">N14b</a> |                      |
|   | Mental strategies of addition and subtraction                | <a href="#">N3a</a>  | <a href="#">N4a</a>  |
|   | Solve problems in the context of perimeter                   | <a href="#">G8b</a>  |                      |
|   | Solve financial maths problems                               | <a href="#">N7c</a>  |                      |
|   | Solve problems involving tables and timetables               | <a href="#">N21b</a> |                      |
|   | Solve problems with frequency trees                          | <a href="#">57</a>   |                      |
|   | Solve problems with bar charts and line charts               | <a href="#">S2a</a>  | <a href="#">S2b</a>  |
| <b>LEARNING LANDMARK 2</b>                        |  |                      |                      |
| Solving problems with Multiplication and Division | Explore multiplication and division in algebraic expressions | <a href="#">A7a</a>  | <a href="#">A7b</a>  |
|   | Understand and use factors                                   | <a href="#">N10</a>  |                      |
|   | Understand and use multiples                                 | <a href="#">N11</a>  |                      |
|   | Multiply and divide by powers of 10                          | <a href="#">N17a</a> | <a href="#">N17b</a> |
|   | Convert metric units   | <a href="#">N7a</a>  | <a href="#">R2</a>   |
|   | Use formal methods to multiply integers                      | <a href="#">N28a</a> |                      |
|   | Use formal method to multiply decimals                       | <a href="#">N28b</a> |                      |
|   | Use formal methods to divide integers                        | <a href="#">N29a</a> |                      |
|   | Use formal method to divide decimals                         | <a href="#">N29b</a> |                      |
|   | Understand and use order of operations                       | <a href="#">N20</a>  |                      |
|   | Solve problems using area of rectangles and parallelograms   | <a href="#">G20a</a> | <a href="#">G20b</a> |
|   | Solve problems using area of a triangle                      | <a href="#">G20c</a> |                      |
|   | Solve problems using the mean                                | <a href="#">S7</a>   |                      |

## Spring 2 - Fractions, Percentages and Directed Numbers

| Unit                                  | Topic  | MathsWatch Video     |  |
|---------------------------------------|--|----------------------|--|
| Fractions/percentages of amounts      | Find a fraction of an amount                         | <a href="#">N33</a>  |  |
|                                       | Use a fraction of an amount to find original amount  |                      |  |
|                                       | Find a percentage of an amount without a calculator  | <a href="#">N24b</a> |  |
|                                       | Find a percentage of an amount using a calculator    | <a href="#">87</a>   |  |
| Directed number                       | Order directed numbers                               | <a href="#">N2a</a>  |  |
|                                       | Add and subtract directed numbers                    | <a href="#">N19a</a> |  |
|                                       | Multiply and divide directed numbers                 | <a href="#">N19b</a> |  |
|                                       | Substitute directed numbers into expressions         | <a href="#">95</a>   |  |
|                                       | Solve two step equations                             | <a href="#">A12</a>  |  |
|                                       | Use hierarchy of operations with directed numbers    | <a href="#">N20</a>  |  |
| Addition and subtraction of fractions | Understand representations of fractions              | <a href="#">N23a</a> |  |
|                                       | Convert between mixed numbers and improper fractions | <a href="#">N35</a>  |  |
|                                       | Equivalent fractions                                 | <a href="#">N23b</a> |  |
|                                       | Add and subtract fractions                           | <a href="#">N36</a>  |  |