



## Year 4 Maths Long Term Overview Scheme 3.0

### Rationale

This overview is designed to run alongside the White Rose Schemes of Learning (Version 3.0) found [here](#). The small steps within White Rose are not necessarily designed to cover one lesson so some may be repeated which can be used to consolidate concepts or allow children greater access to reasoning and problem solving. This is particularly evident in the Y1 schemes. The lessons that are linked to the [DFE ready to progress criteria](#) are identified with a reference such as **(NPV-1)**, teachers can use these to refer to the document for additional planning support. Due to differing term lengths, these overviews do not directly match those on White Rose. For instance, some units are started earlier in the term or the term before, but they all correlate with the schemes of learning.

### Vocabulary

There are also two vocabulary rows on the document, which show the subject specific vocabulary that needs to be introduced or re-introduced as part of the unit as well as what should have been covered in the previous year group. It is essential that teachers refer to previous year's vocabulary especially if children are not secure. If children are still struggling to define certain pieces of vocabulary, teachers should be encouraged to reintroduce them. Whole school vocabulary progression documents are within the Maths area on ReachIn and this language is also present on the accompanying knowledge organisers.

### Consolidation/revisiting

The consolidation row has been removed from the most recent overviews as we suggest that the White Rose 'Flashback 4s' are used to revisit and consolidate learning as they reduce workload for teachers and comprehensively revisit taught content. If you chose not to use these, teachers should be encouraged to spend half the week looking at the previous year's small steps before teaching a unit and revisit them briefly. For the other half, they'd be encouraged to revisit learning they've done during the current year.

Also, the new White Rose schemes have removed the explicit recap sessions, however the beginning of the units include steps from the previous year to ensure children have the required knowledge to access new learning.

### Assessment/Consolidation Weeks

The end of unit assessments have been left in, these can be taken from the previous years' resources as they will broadly match the topic being taught. Finally, within the plans there are also assessment/consolidation weeks which have been put in to revisit topics children struggled with or as buffers for if and when units overrun to accommodate assessments, trips, productions etc. These documents are also fully editable so topics or assessment weeks can be moved around or lengthened if necessary and to accommodate different term lengths. The term lengths are kept as seven weeks for the two autumn half terms and summer 2 and six for the rest. However, they can be adapted to meet differing term lengths

**Currently only Autumn term on document**

| Autumn 1                                | Week 1  | Week 2   | Week 3  | Week 4  | Week 5  | Week 6  | Week 7   |
|---|---|--|---|---|---|---|--|
| <b>Units</b>                            | <b>Number: Place Value</b>  | <b>Number: Place Value</b>   | <b>Number: Place Value</b>  | <b>Number: Place Value</b>  | <b>Number: Addition and subtraction</b>   | <b>Number: Addition and subtraction</b>   | <b>Number: Addition and subtraction</b>  |
| <b>Lesson objectives (Small steps)</b>  | 1) Represent numbers to 1,000 <b>(NPV-2)</b><br>2) Partition numbers to 1,000 <b>(NPV-2)</b><br>3) Number line to 1,000 <b>(NPV-3)</b><br>4) Thousands <b>(NPV-2)</b> | 5) Represent numbers to 10,000 <b>(NPV-2)</b><br>6) Partition numbers to 10,000 <b>(NPV-2)</b><br>7) Flexible partitioning of numbers to 10,000 <b>(NPV-2)</b><br>8) Find 1, 10, 100, 1000 more or less <b>(NPV-3)</b> | 9) Number line to 10,000 <b>(NPV-3)</b><br>10) Estimate on a number line to 10,000 <b>(NPV-3)</b><br>11) Compare numbers to 10,000 <b>(NPV-3)</b><br>12) Order numbers to 10,000 <b>(NPV-3)</b><br>13) Roman numerals | 14) Round to the nearest 10 <b>(NPV-3)</b><br>15) Round to the nearest 100 <b>(NPV-3)</b><br>1) Count in 25s <b>(NPV-3)</b><br>16) Round to the nearest 1,000 <b>(NPV-3)</b><br>17) Round to the nearest 10, 100 or 1,000<br>18) Mini assessment (end of unit assessment) | 1) Add and subtract 1s, 10s, 100s and 1000s<br>2) Add up to two 4-digit numbers – no exchange<br>3) Add two 4-digit numbers – one exchange<br>4) Add two 4-digit numbers – More than one exchange | 5) Subtract two 4-digit numbers – no exchange<br>6) Subtract two 4-digit numbers – one exchange<br>7) Subtract two 4-digit numbers – more than one exchange | 8) Efficient subtraction<br>9) Estimate answers<br>10) Checking strategies<br>11) Mini-assessment (end of unit assessment) |
| <b>Vocabulary (Year group specific)</b> | Four-digit<br>Thousands   | Four-digit<br>Thousands<br>1000 more<br>1000 less  | Thousands<br>Four-digit<br>1000 more<br>1000 less<br>Roman Numerals<br>Round  | Thousands<br>1000 more<br>1000 less<br>Four-digit<br>Round  | 4-digit number<br>Thousands<br>Operations<br>Methods  | 4-digit number<br>Thousands<br>Operations<br>Methods  | 4-digit number<br>Thousands<br>Operations<br>Methods   |
| <b>Previous years Vocabulary</b>        | Count in multiples<br>3-digit number<br>Hundreds<br>10 or 100 more<br>10 or 100 less  | Count in multiples<br>3-digit number<br>Hundreds<br>10 or 100 more<br>10 or 100 less   | Count in multiples<br>3-digit number<br>Hundreds<br>10 or 100 more<br>10 or 100 less  | Count in multiples<br>3-digit number<br>Hundreds<br>10 or 100 more<br>10 or 100 less  | 3-digit number<br>Hundreds<br>Column addition<br>Column subtraction<br>Exchange<br>Estimate<br>Complements<br>Operations  | 3-digit number<br>Hundreds<br>Column addition<br>Column subtraction<br>Exchange<br>Estimate<br>Complements<br>Operations                                    | 3-digit number<br>Hundreds<br>Column addition<br>Column subtraction<br>Exchange<br>Estimate<br>Complements<br>Operations   |

| Autumn 2                                | Week 1  | Week 2   | Week 3   | Week 4   | Week 5  | Week 6  | Week 7   |
|---|---|--|--|--|---|---|--|
| <b>Units</b>                            | <b>Measurement: Area</b>  | <b>Number: Multiplication and division</b>   | <b>Assessment/ consolidation week</b>  | <b>Number: Multiplication and division</b>   | <b>Number: Multiplication and division</b>  | <b>Number: Multiplication and division</b>  | <b>Consolidation</b>   |
| <b>Lesson objectives (Small steps)</b>  | 1) What is area?<br>2) Count squares<br>3) Make shapes<br>4) Comparing areas<br>5) Mini-assessment (end of unit assessment)<br><br>Unit could be extended to be over two weeks and time taken from assessment week or Multiplication and Division | 1) Multiples of 3 ( <b>NF1, MD-2</b> )<br>2) Multiply and divide by 6 ( <b>NF1, MD-2</b> )<br>3) 6 times-table and division facts ( <b>NF1, MD-2</b> ) | Week can be used to carry out assessment or as an opportunity to consolidate learning done so far.<br><br>Also can be used as a buffer for any units that overrun such as area | 4) Multiply and divide by 9 ( <b>NF1, MD-2</b> )<br>5) 9 times-table and division facts ( <b>NF1, MD-2</b> )<br><b>6</b><br>6) 3, 6 and 9 times-table ( <b>NF1, MD-2</b> ) | 7) Multiply and divide by 7 ( <b>NF1, MD-2</b> )<br>8) 7 times-table and division facts ( <b>NF1, MD-2</b> )<br>9) 11 times-table and division facts ( <b>NF1, MD-2</b> )<br>10) 12 times-table and division facts ( <b>NF1, MD-2</b> ) | 11) Multiply by 1 and 0<br>12) Divide a number by 1 and itself ( <b>NF1, MD-2</b> )<br>13) Multiply 3 numbers ( <b>NF1, MD-2</b> )<br>14) Mini assessment/problem solving | Week used for additional activities on content learnt or as consolidation.<br><br>Could also be used to bring forward the first week of next term. |
| <b>Vocabulary (Year group specific)</b> | Area  | Derived facts<br>Distributive law  |  | Derived facts<br>Distributive law  | Derived facts<br>Distributive law   | Derived facts<br>Distributive law   |  |
| <b>Previous years Vocabulary</b>        | N/A   | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived Facts                             |  | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived Facts   | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived Facts  | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived Facts  |  |

| Spring 1                                   | Week 1   | Week 2  | Week 3   | Week 4   | Week 5   | Week 6  |
|--|--|---|--|--|--|---|
| <b>Units</b>                               | <b>Number:<br/>Multiplication and division<br/>B</b>   | <b>Number:<br/>Multiplication and division<br/>B</b>  | <b>Number:<br/>Multiplication and division<br/>B</b>   | <b>Measurement: Length and<br/>perimeter</b>   | <b>Measurement: Length and<br/>perimeter</b>   | <b>Fractions</b>  |
| <b>Lesson objectives<br/>(Small steps)</b> | 1) Factor pairs <b>(MD-2)</b><br>2) Use factor pairs <b>(MD-2)</b><br>3) Multiply by 10 <b>(MD-1)</b><br>4) Multiply by 100 <b>(MD-1)</b><br>5) Divide by 10 <b>(MD-1)</b> | 6) Divide by 100 <b>(MD-1)</b><br>7) Related facts – multiplication and division <b>(MD-2)</b><br>8) Informal written methods for multiplication<br>9) Multiply a 2-digit number by a 1-digit number<br>10) Multiply a 3-digit number by a 1-digit number | 11) Divide a 2-digit number by a 1-digit number (1)<br>12) Divide a 2-digit number by a 1-digit number (2)<br>13) Divide a 3-digit number by a 1-digit number<br>14) Correspondence problems <b>(MD-3)</b><br>15) Efficient multiplication <b>(MD-3)</b><br><br>16) Mini-assessment (end of unit assessment) | 1) Measure in kilometres and metres<br>2) Equivalent lengths (kilometres and metres)<br>3) Perimeter on a grid <b>(G-2)</b><br>4) Perimeter of a rectangle <b>(G-2)</b><br>5) Perimeter of rectilinear shapes <b>(G-2)</b> | 6) Find missing shapes in rectilinear shapes <b>(G-2)</b><br>7) Calculate the perimeter of rectilinear shapes <b>(G-2)</b><br>8) Perimeter of regular polygons <b>(G-2)</b><br>9) Perimeter of polygons <b>(G-2)</b><br>10) Mini-assessment (end of unit assessment) | 1) Understand the whole<br>2) Count beyond 1<br>3) Partition a mixed number <b>(F-2)</b><br>4) Number lines with mixed numbers <b>(F-1)</b> |
| <b>Vocabulary (Year group specific)</b>    | Formal written layout<br>Factor pairs<br>Distributive law  | Formal written layout<br>Factor pairs<br>Distributive law<br>Remainders   | Formal written layout<br>Factor pairs<br>Distributive law<br>Remainders  | Rectilinear figure<br>Kilometres   | Rectilinear figure<br>Kilometres   | Convert<br>Proper fractions<br>Improper fractions   |
| <b>Previous years Vocabulary</b>           | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Exchange<br>Derived facts<br>Remainders                       | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Exchange<br>Derived facts<br>Remainders  | Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Exchange<br>Derived Facts<br>Remainders   | Millimetre mm<br>Perimeter   | Millimetre mm<br>Perimeter   | Equivalent fractions<br>Tenths<br>Numerator<br>Denominator<br>One whole   |

| Spring 2                                | Week 1   | Week 2   | Week 3  | Week 4  | Week 5  | Week 6  |
|---|--|--|---|---|---|---|
| <b>Units</b>                            | <b>Fractions</b>   | <b>Fractions</b>   | <b>Fractions</b>  | <b>Decimals</b>   | <b>Decimals</b>   | <b>Decimals</b>   |
| <b>Lesson objectives (Small steps)</b>  | 5) Compare and order mixed numbers <b>(F-1)</b><br>6) Understand improper fractions <b>(F-2)</b><br>7) Convert mixed numbers to improper fractions <b>(F-2)</b><br>8) Convert improper fractions to mixed numbers <b>(F-2)</b> | 9) Equivalent fractions on a number line <b>(F-1)</b><br>10) Equivalent fraction families <b>(F-1)</b><br>11) Add two or more fractions <b>(F-3)</b><br>12) Add fractions and mixed numbers <b>(F-3)</b> | 13) Subtract two fractions <b>(F-3)</b><br>14) Subtract from whole amounts <b>(F-3)</b><br>15) Subtract from mixed numbers <b>(F-3)</b><br>16) Mini assessment (end of unit assessment) | 1) Tenths as fractions<br>2) Tenths as decimals<br>3) Tenths on a place value chart<br>4) Tenths on a number line | 5) Divide 1-digit number by 10<br>6) Divide 2-digit number by 10<br>7) Hundredths as fractions<br>8) Hundredths as decimals | 9) Hundredths on a place value grid<br>10) Divide 1- or 2-digit number by 100<br>11) Mini assessment (end of unit assessment)<br><br>Rest of the week to be used for consolidation and ass buffer for any units that overrun. |
| <b>Vocabulary (Year group specific)</b> | Convert Proper fractions<br>Improper fractions<br>Mixed numbers  | Convert Proper fractions<br>Improper fractions<br>Mixed numbers  | Convert Proper fractions<br>Improper fractions<br>Mixed numbers   | Decimal equivalence<br>Hundredths   | Decimal equivalence<br>Hundredths   | Decimal equivalence<br>Hundredths   |
| <b>Previous years Vocabulary</b>        | Equivalent fractions<br>Tenths<br>Numerator<br>Denominator<br>One whole  | Equivalent fractions<br>Tenths<br>Numerator<br>Denominator<br>One whole  | Equivalent fractions<br>Tenths<br>Numerator<br>Denominators<br>One whole  | Tenths  | Tenths  | Tenths  |