

# Year 3 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 <u>here</u>. 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. The lessons that are linked to the <u>DFE ready to progress criteria</u> 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
Units	Number: Place Value	Number: Place Value	Number: Place Value	Number: Addition and subtraction	Number: Addition and subtraction	Number: Addition and subtraction	Number: Addition and subtraction
Lesson objectives (Small steps)	<ol> <li>1) Represent numbers to 100 (NPV-2)</li> <li>2) Partition numbers to 100 (NPV-2)</li> <li>3) Numbers line to 100 (NPV-3)</li> <li>4) Hundreds (NPV-1, NPV-2)</li> <li>5) Represent numbers to 1000 (NPV-2)</li> </ol>	<ul> <li>6) Partition numbers</li> <li>to 1000 (NPV-2)</li> <li>7) Flexible partitioning</li> <li>of numbers to 1000 (NPV-2)</li> <li>8) Hundreds, tens and</li> <li>ones (NPV-2)</li> <li>9) Find 1,10 and 100</li> <li>more or less (NPV-3)</li> <li>10) Number line to</li> <li>1000 (NPV-3)</li> </ul>	<ul> <li>11) Estimate on a number line to 1000 (NPV-3)</li> <li>12) Compare numbers to 1000 (NPV-3)</li> <li>13) Order numbers to 1000 (NPV-3)</li> <li>14) Count in 50s (NPV- 4)</li> <li>15) Mini-assessment (end of unit assessment)</li> </ul>	<ol> <li>Apply number bonds within 10</li> <li>Add and subtract 1s</li> <li>(AS-2)</li> <li>Add and subtract</li> <li>10s (AS-2)</li> <li>Add and subtract</li> <li>100s (AS-2)</li> <li>Spot the pattern</li> <li>(AS-2)</li> </ol>	6) Add 1s across a 10 (AS-2) 7) Add 10s across 100 (AS-2) 7) Subtract 1s across a 10 (AS-2) 9) Subtract 10s across 100 (AS-2) 10) Make connections (AS-2)	<ul> <li>11) Add two numbers</li> <li>(no exchange) (AS-2)</li> <li>12) Subtract two</li> <li>numbers (no</li> <li>exchange) (AS-2)</li> <li>13) Add two numbers</li> <li>(across a 10) (AS-2)</li> <li>14) Add two numbers</li> <li>(across a 100) (AS-2)</li> </ul>	<ul> <li>15) Subtract two</li> <li>numbers (across a 10)</li> <li>(AS-2)</li> <li>16) Subtract two</li> <li>numbers (across a</li> <li>100) (AS-2)</li> <li>17) Add 2-digit and 3-</li> <li>digit numbers (AS-2)</li> <li>18) Subtract a 2-digit</li> <li>number from a 3-digit</li> <li>number (AS-2)</li> </ul>
Vocabulary (Year group specific)	Three-digit hundreds	Three-digit 10 or 100 more 10 or 100 less hundreds	Three-digit Ascending Descending hundreds 10 or 100 more 10 or 100 less	3 digit number Estimate	3-digit number Column addition Column subtraction Estimate Exchange	3-digit number Column addition Column subtraction Estimate Exchange	3-digit number Column addition Column subtraction Estimate Exchange
Previous years Vocabulary	Multiples Place value Compare Count in steps Estimate Partition Tens Ones	Place value Compare Count in steps Estimate Partition Tens Ones	Multiples Place value Compare Count in steps Digit Two digits Estimate	Facts 2-digit number Commutative Inverse Number bonds Addition/add Subtraction/subtract	Facts 2-digit number Commutative Inverse Addition/add Subtraction/subtract	Facts 2-digit number Commutative Inverse Addition/add Subtraction/subtract	Facts 2-digit number Commutative Inverse Addition/add Subtraction/subtract

Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Units	Number: Addition and subtraction	Number: Multiplication and division A	Assessment/ consolidation week	Number: Multiplication and division A	Number: Multiplication and division A	Number: Multiplication and division A	Consolidation week
Lesson objectives (Small steps)	<ul> <li>19) Complements to</li> <li>100 (AS-1)</li> <li>20) Estimate answers</li> <li>(AS-2)</li> <li>21) Inverse operations</li> <li>(AS-2)</li> <li>22) Make decisions</li> <li>23) Mini-assessment</li> <li>(end of unit assessment)</li> </ul>	<ol> <li>Multiplication – equal groups (MD-1)</li> <li>Using arrays (MD-1)</li> <li>Multiples of 2 (MD-1)</li> <li>Multiples of 5 and</li> <li>(MD-1)</li> </ol>	Assessment week or consolidation week. This can also act as a buffer for any units that overran	5) Sharing and grouping (MD-1) 6) Multiply by 3 (MD- 1) 7) Divide by 3 (MD-1) 8) The 3 times-table (NF -2)	<ul> <li>9) Multiply by 4 (MD-</li> <li>1)</li> <li>10) Divide by 4 (MD-1)</li> <li>11) The 4 times-tables</li> <li>(NF -2)</li> <li>12) Multiply by 8 (MD-</li> <li>1)</li> </ul>	<ul> <li>13) Divide by 8 (MD-1)</li> <li>14) The 8 times-table</li> <li>(NF -2)</li> <li>15) The 2, 4 and 8</li> <li>times-tables (NF -2)</li> <li>16) Mini-assessment</li> <li>(end of unit assessment)</li> </ul>	Revisit concepts children struggled with as well as act as a buffer for any units that overran
Vocabulary (Year group specific)	3-digit number Column addition Column subtraction Estimate Exchange Complements Operations	Mathematical statements Missing number problems Correspondence problems Derived facts		Mathematical statements Missing number problems Correspondence problems Derived facts	Mathematical statements Missing number problems Correspondence problems Derived facts	Mathematical statements Missing number problems Correspondence problems Derived facts	
Previous years Vocabulary	Facts 2-digit number Commutative Inverse	Commutative Repeated addition Multiplication tables Odd numbers Even numbers		Commutative Repeated addition Multiplication tables Odd numbers Even numbers	Commutative Repeated addition Multiplication tables Odd numbers Even numbers	Commutative Repeated addition Multiplication tables Odd numbers Even numbers	

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	Number: Multiplication and division B	Number: Multiplication and division B	Number: Multiplication and division B	Measurement: Length and Perimeter	Measurement: Length and Perimeter	Measurement: Length and Perimeter
Lesson objectives (Small steps)	<ol> <li>Multiples of 10 (MD-1)</li> <li>Related calculations (MD-1)</li> <li>Reasoning about multiplication (MD-1)</li> <li>Multiply a 2-digit number by a 1 digit number- no exchange (MD-1)</li> </ol>	<ul> <li>5) Multiply a 2-digit number by 1 digit number</li> <li>with exchange (MD-1)</li> <li>6) Link multiplication and division (MD-1)</li> <li>7) Divide a 2-digit number by a 1-digit number</li> <li>no exchange (MD-1)</li> <li>8) Divide a 2-digit number by a 1-digit number – flexible partitioning (MD-1)</li> </ul>	<ul> <li>9) Divide a 2-digit number</li> <li>9) Divide a 2-digit number – with remainders (MD-1)</li> <li>10) Scaling (NF-3) (MD-1)</li> <li>11) How many ways? (MD-1)</li> <li>12) Mini assessment (end of unit assessment)</li> </ul>	<ol> <li>Measure in metres and centimetres</li> <li>Measure in millimetres</li> <li>Measure in centimetres and millimetres</li> <li>Metres, centimetres and millimetres</li> </ol>	<ul> <li>5) Equivalent lengths (metres and centimetres) (NPV-2)</li> <li>6) Equivalent lengths (centimetres and millimetres) (NPV-2)</li> <li>7) Compare lengths (NPV-3)</li> <li>8) Add lengths (AS-2)</li> </ul>	<ul> <li>9) Subtract lengths (AS-2)</li> <li>10) What is perimeter?</li> <li>(AS-2)</li> <li>10) Measure perimeter</li> <li>(AS-2)</li> <li>11) Calculate perimeter</li> <li>(AS-2)</li> <li>12) Mini assessment (end of unit assessment)</li> </ul>
Vocabulary (Year group specific)	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange Remainders	Millimetre mm Equivalent	Millimetre mm Equivalent	Millimetre mm Equivalent Perimeter
Previous years Vocabulary	Commutative Repeated addition Multiplication tables Odd numbers Even numbers Derived facts	Commutative Repeated addition Multiplication tables Odd numbers Even numbers Derived facts	Commutative Repeated addition Multiplication tables Odd numbers Even numbers Derived facts	Standard units Estimate Measure Compare Order Record results Centimetre cm Metre m	Standard units Estimate Measure Compare Order Record results Centimetre cm Metre m	Standard units Estimate Measure Compare Order Record results Centimetre cm Metre m

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	Fractions A	Fractions A	Fractions A	Measurement: Mass and capacity	Measurement: Mass and capacity	Measurement: Mass and capacity
Lesson objectives (Small steps)	<ol> <li>Understand the denominators of unit fractions (F-1)</li> <li>Compare and order unit fractions (F-3)</li> <li>Understand the numerator of non-unit fractions (F-1)</li> <li>Understand the whole (F-1)</li> </ol>	5) Compare and order non- unit fractions (F-3) 6) Fractions and scales (F- 3) 7) Fractions on a number line (F-3)	<ul> <li>8) Count in fractions on a number line (F-3)</li> <li>9) Equivalent fractions on a number line (F-1)</li> <li>10) Equivalent fractions as bar models (F-1)</li> <li>11) Mini assessment (end of unit assessment)</li> </ul>	<ol> <li>Use scales</li> <li>Measure mass in grams</li> <li>Measure mass in kilograms and grams</li> <li>Equivalent masses (kilograms and grams)</li> </ol>	<ul> <li>5) Compare mass</li> <li>6) Add and subtract mass</li> <li>7) Measure capacity and volume in millilitres</li> <li>8) Measure capacity and volume in litres and millilitres</li> </ul>	<ul> <li>9) Equivalent capacities and volumes (litres and millilitres)</li> <li>10) Compare capacity and volume</li> <li>11) Add and subtract capacity and volume</li> <li>12) Mini assessment (end of unit assessment)</li> </ul>
Vocabulary (Year group specific)	Tenths	Tenths	Equivalent fractions Tenths	Consolidate previous years	Consolidate previous years	Consolidate previous years
Previous years Vocabulary	Three quarters Third Equivalence Unit fractions Non-unit fractions Numerator Denominator One whole	Three quarters Third Equivalence Unit fractions Non-unit fractions Numerator Denominator One whole	Three quarters Third Equivalence Unit fractions Non-unit fractions Numerator Denominator One whole	Kilogram kg Gram g Millilitres ml Litres l Quarter full Three-quarter full Scales Temperature Celsius	Kilogram kg Gram g Millilitres ml Litres I Quarter full Three-quarter full Scales Temperature Celsius	Kilogram kg Gram g Millilitres ml Litres I Quarter full Three-quarter full Scales Temperature Celsius