## Year 3 Maths Long Term Curriculum Overview

## 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.

## 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.

## Consolidation/revisiting

Daily 'Flashback $4 s^{\prime}$ are used to revisit and consolidate learning as they reduce workload for teachers and comprehensively revisit taught content.
The beginning of the units include steps from the previous year to ensure children have the required knowledge to access new learning.
Consolidation weeks are built in throughout the year for teachers to revisit or consolidate concepts.

| 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) | 1) Represent numbers to 100 (NPV-2) <br> 2) Partition numbers to 100 (NPV-2) <br> 3) Numbers line to 100 (NPV-3) <br> 4) Hundreds (NPV-1, NPV-2) <br> 5) Represent numbers to 1000 (NPV-2) | 6) Partition numbers to 1000 (NPV-2) <br> 7) Flexible partitioning of numbers to 1000 (NPV-2) <br> 8) Hundreds, tens and ones (NPV-2) <br> 9) Find 1,10 and 100 more or less (NPV-3) 10) Number line to 1000 (NPV-3) | 11) Estimate on a number line to 1000 (NPV-3) <br> 12) Compare numbers to 1000 (NPV-3) <br> 13) Order numbers to 1000 (NPV-3) <br> 14) Count in 50 s (NPV- <br> 4) <br> 15) Mini-assessment (end of unit assessment) | 1) Apply number bonds within 10 <br> 2) Add and subtract 1s <br> (AS-2) <br> 3) Add and subtract 10s (AS-2) <br> 4) Add and subtract 100s (AS-2) <br> 5) Spot the pattern (AS-2) | 6) Add 1 s across a 10 (AS-2) <br> 7) Add 10s across 100 <br> (AS-2) <br> 8) Subtract 1 s across a 10 (AS-2) <br> 9) Subtract 10 s across 100 (AS-2) <br> 10) Make connections (AS-2) | 11) Add two numbers (no exchange) (AS-2) 12) Subtract two numbers (no exchange) (AS-2) <br> 13) Add two numbers (across a 10) (AS-2) 14) Add two numbers (across a 100) (AS-2) | 15) Subtract two numbers (across a 10) (AS-2) <br> 16) Subtract two numbers (across a 100) (AS-2) <br> 17) Add 2-digit and 3digit numbers (AS-2) 18) Subtract a 2-digit number from a 3-digit number (AS-2) |
| Vocabulary (Year group specific) | Three-digit hundreds | Three-digit 10 or 100 more 10 or 100 less hundreds | Three-digit <br> Ascending <br> Descending hundreds <br> 10 or 100 more <br> 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 <br> Place value <br> Compare <br> Count in steps <br> Estimate <br> Partition <br> Tens <br> Ones | Place value <br> Compare <br> Count in steps <br> Estimate <br> Partition <br> Tens <br> Ones | Multiples <br> Place value <br> Compare <br> Count in steps <br> Digit <br> Two digits <br> Estimate | Facts <br> 2-digit number <br> Commutative <br> Inverse <br> Number bonds <br> Addition/add <br> Subtraction/subtract | Facts <br> 2-digit number <br> Commutative <br> Inverse <br> Addition/add <br> Subtraction/subtract | Facts <br> 2-digit number <br> Commutative <br> Inverse <br> Addition/add <br> Subtraction/subtract | Facts <br> 2-digit number <br> Commutative <br> Inverse <br> Addition/add <br> Subtraction/subtract |


| Autumn 2 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Units | Number: Addition and subtraction | Number: <br> Multiplication and division A | Assessment/ consolidation week | Number: <br> Multiplication and division A | Number: <br> Multiplication and division A | Number: <br> Multiplication and division A | Consolidation week |
| Lesson objectives (Small steps) | 19) Complements to 100 (AS-1) <br> 20) Estimate answers (AS-2) <br> 21) Inverse operations (AS-2) <br> 22) Make decisions <br> 23) Mini-assessment (end of unit assessment) | 1) Multiplication equal groups (MD-1) <br> 2) Using arrays (MD-1) <br> 3) Multiples of 2 (MD- <br> 1) <br> 4) Multiples of 5 and 10 (MD-1) | Assessment week or consolidation week. This can also act as a buffer for any units that overran | 5) Sharing and grouping (MD-1) <br> 6) Multiply by 3 (MD- <br> 1) <br> 7) Divide by 3 (MD-1) <br> 8) The 3 times-table <br> (NF-2) | 9) Multiply by 4 (MD- <br> 1) <br> 10) Divide by 4 (MD-1) <br> 11) The 4 times-tables <br> (NF -2) <br> 12) Multiply by 8 (MD- <br> 1) | 13) Divide by 8 (MD-1) <br> 14) The 8 times-table <br> (NF -2) <br> 15) The 2,4 and 8 times-tables (NF -2) <br> 16) Mini-assessment (end of unit assessment) | Revisit concepts children struggled with as well as act as a buffer for any units that overran |
| Vocabulary (Year group specific) | 3-digit number <br> Column addition <br> Column subtraction <br> Estimate <br> Exchange <br> Complements <br> 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 <br> 2-digit number Commutative Inverse | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers |  | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> 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) | 1) Multiples of 10 (MD-1) <br> 2) Related calculations <br> (MD-1) <br> 3) Reasoning about multiplication (MD-1) <br> 4) Multiply a 2-digit number by a 1 digit number- no exchange (MD-1) | 5) Multiply a 2-digit number by 1 digit number - with exchange (MD-1) <br> 6) Link multiplication and division (MD-1) <br> 7) Divide a 2-digit number by a 1-digit number - no exchange (MD-1) <br> 8) Divide a 2-digit number by a 1-digit number flexible partitioning (MD-1) | 9) Divide a 2-digit number by a 1-digit number - with remainders (MD-1) 10) Scaling (NF-3) (MD-1) <br> 11) How many ways? (MD1) <br> 12) Mini assessment (end of unit assessment) | 1) Measure in metres and centimetres <br> 2) Measure in millimetres <br> 3) Measure in centimetres and millimetres <br> 4) Metres, centimetres and millimetres | 5) Equivalent lengths (metres and centimetres) <br> (NPV-2) <br> 6) Equivalent lengths (centimetres and millimetres) (NPV-2) <br> 7) Compare lengths (NPV- <br> 3) <br> 8) Add lengths (AS-2) | 9) Subtract lengths (AS-2) 10) What is perimeter? <br> (AS-2) <br> 10) Measure perimeter (AS-2) <br> 11) Calculate perimeter (AS-2) <br> 12) Mini assessment (end of unit assessment) |
| 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 <br> Equivalent <br> Perimeter |
| Previous years Vocabulary | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers <br> Derived facts | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers <br> Derived facts | Commutative <br> Repeated addition <br> Multiplication tables <br> Odd numbers <br> Even numbers <br> Derived facts | Standard units <br> Estimate <br> Measure <br> Compare <br> Order <br> Record results <br> Centimetre cm <br> Metre m | Standard units <br> Estimate <br> Measure <br> Compare <br> Order <br> Record results <br> Centimetre cm <br> Metre m | Standard units <br> Estimate <br> Measure <br> Compare <br> Order <br> Record results <br> Centimetre cm <br> 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) | 1) Understand the denominators of unit fractions (F-1) <br> 2) Compare and order unit fractions (F-3) <br> 3) Understand the numerator of non-unit fractions (F-1) <br> 4) Understand the whole (F-1) | 5) Compare and order nonunit fractions (F-3) <br> 6) Fractions and scales (F- <br> 3) <br> 7) Fractions on a number line (F-3) | 8) Count in fractions on a number line (F-3) <br> 9) Equivalent fractions on a number line ( $\mathrm{F}-1$ ) <br> 10) Equivalent fractions as bar models ( $\mathbf{F - 1}$ ) <br> 11) Mini assessment (end of unit assessment) | 1) Use scales <br> 2) Measure mass in grams <br> 3) Measure mass in kilograms and grams <br> 4) Equivalent masses <br> (kilograms and grams) | 5) Compare mass <br> 6) Add and subtract mass <br> 7) Measure capacity and volume in millilitres <br> 8) Measure capacity and volume in litres and millilitres | 9) Equivalent capacities and volumes (litres and millilitres) <br> 10) Compare capacity and volume <br> 11) Add and subtract capacity and volume 12) Mini assessment (end of unit assessment) |
| Vocabulary (Year group specific) | Tenths | Tenths | Equivalent fractions Tenths | Consolidate previous years | Consolidate previous years | Consolidate previous years |
| Previous years Vocabulary | Three quarters <br> Third <br> Equivalence <br> Unit fractions <br> Non-unit fractions <br> Numerator <br> Denominator <br> One whole | Three quarters <br> Third <br> Equivalence <br> Unit fractions <br> Non-unit fractions <br> Numerator <br> Denominator <br> One whole | Three quarters <br> Third <br> Equivalence <br> Unit fractions <br> Non-unit fractions <br> Numerator <br> Denominator <br> One whole | Kilogram kg <br> Gram g <br> Millilitres ml <br> Litres I <br> Quarter full <br> Three-quarter full <br> Scales <br> Temperature Celsius | Kilogram kg <br> Gram g <br> Millilitres ml <br> Litres I <br> Quarter full <br> Three-quarter full <br> Scales <br> Temperature <br> Celsius | Kilogram kg <br> Gram g <br> Millilitres ml <br> Litres I <br> Quarter full <br> Three-quarter full <br> Scales <br> Temperature <br> Celsius |


| Summer 1 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Units | Fractions B | Fractions B | Money | Money | Time | Time |
| Lesson objectives (Small steps) | 1) Add fractions (F-4) <br> 2) Subtract fractions (F-4) <br> 3) Partition the whole | 4) Unit fractions of a set of objects <br> 5) Non-unit fractions of a set of objects <br> 6) Reasoning with fractions of an amount <br> 7) Mini-assessment (end of unit assessment) | 1) Pounds and pence <br> 2) Convert pounds and pence (NPV-2) <br> 3) Add money (AS-2) | 4) Subtract Money (AS-2) <br> 5) Find change (AS-2) <br> 6) Mini-assessment (end of unit assessment) | 1) Roman numerals to 12 <br> 2) Tell the time to 5 minutes <br> 3) Tell the time to the minute <br> 4) Read time on a digital clock | 5) Use AM and PM <br> 6) Years, months and days <br> 7) Days and hours <br> 8) Hours and minutes - use start and end times |
| Vocabulary (Year group specific) | Equivalent fractions Tenths | Equivalent fractions Tenths | Consolidate previous years | Consolidate previous years | Analogue clock <br> Digital <br> Roman numerals <br> Noon <br> Midnight | a.m./p.m. <br> 12-hour clock <br> 24-hour clock <br> Leap year |
| Previous years Vocabulary | Three quarters <br> Third <br> Equivalence <br> Unit fractions <br> Non-unit fractions <br> Numerator <br> Denominators <br> One whole | Three quarters <br> Third <br> Equivalence <br> Unit fractions <br> Non-unit fractions <br> Numerator <br> Denominators <br> One whole | Value <br> Change <br> Pounds <br> Pence | Value <br> Change <br> Pounds Pence | Intervals of time <br> Quarter past/to <br> Duration | Intervals of time <br> Quarter past/to <br> Duration |


| Summer 2 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Units | Time | Shape | Shape | Statistics | Statistics | Consolidation |  |
| Lesson objectives (Small steps) | 9) Hours and minutes <br> - use durations <br> 10) Minutes and seconds <br> 11) Units of time <br> 12) Solve problems with time <br> 13) Mini-assessment (end of unit assessment) | 1) Turns and angles (G- <br> 1) <br> 2) Right angles (G-1) <br> 3) Compare angles (G- <br> 1) <br> 4) Measure and draw accurately (G-2) <br> 5) Horizontal and vertical (G-2) | 6) Parallel and perpendicular (G-2) <br> 7) Recognise and describe 2D shapes (G- <br> 2) <br> 8) Draw polygons <br> 9) Recognise and describe 3D shapes (G- <br> 2) <br> 10) Make 3D shapes <br> (G-2) <br> Mini-assessment (end of unit assessment) | 1) Interpret pictograms <br> 2) Draw pictograms <br> 3) Interpret bar charts | 4) Draw bar charts <br> 5) Collect and represent data <br> 6) Two-way tables <br> 7) Mini assessment (end of unit assessment) | These weeks to act as buffer for any units that needed to be extended due to AFL. This is also to be used as a reflection of assessment week to address any gaps in knowledge children have within the current years' curriculum and to revisit and consolidate learning from the year. Once these are devised they can be added to the overview <br> These weeks can also be used to extend the shape unit as it is 10 small steps and may run over. |  |
| Vocabulary (Year group specific) | Analogue clock <br> Digital <br> Roman numerals <br> Noon <br> Midnight <br> Leap year <br> a.m./p.m. <br> 12-hour clock <br> 24-hour clock | Orientations <br> Angles <br> Turn <br> Right angles <br> Right angle triangle <br> Half turn <br> Three quarters of a turn <br> Greater than right angle <br> Less than right angle <br> Horizontal lines <br> Vertical lines <br> Acute angles <br> Obtuse Angles <br> Line of symmetry | Perpendicular lines <br> Parallel lines <br> Orientations <br> Angles <br> Turn <br> Right angles <br> Right angle triangle <br> Half turn <br> Three quarters of a turn <br> Greater than right angle <br> Less than right angle <br> Horizontal lines <br> Vertical lines <br> Polygon | Bar chart | Bar chart <br> Two-way tables Data |  |  |
| Previous years Vocabulary | Intervals of time <br> Quarter past/to <br> Duration <br> Minutes <br> Seconds | Edges <br> Vertices <br> Faces <br> Sides | Edges <br> Vertices <br> Faces <br> Sides | Table <br> Pictograms <br> Tally chart <br> Block diagram <br> Simple table <br> Category <br> Sorting <br> Totalling <br> Comparing <br> Horizontal <br> Vertical | Table <br> Pictograms <br> Tally chart <br> Block diagram <br> Simple table <br> Category <br> Sorting <br> Totalling <br> Comparing <br> Horizontal <br> Vertical |  |  |

