

Year 3 and 4 Mixed – Medium Term Plan

Guidance

- The Units below **MUST** be taught in this order.
- Use the **Meridian calculation policy**.
- Complete the summative assessments at the times stated on the assessment calendar.
- Formally assess the children's understanding continuously to inform **instant interventions** and **adapt** lessons to meet their needs.
- There is **additional time** built into the units for teachers to break one lesson into two, add in additional lessons, carry out **intervention or enrichment lessons** or do anything else as needed for their class.
- Any time left at the end of each term should be used for **closing the gap** and giving children the opportunity to **apply** their learnt skills to a real-life context, a shop, an estate agent, a car salesroom, a factory, planning a holiday etc. and open-ended investigations.
- Lesson starters may be used to consolidate previous learning in all areas, including **number, shape and measure**. Initially, these will be used to **apply skills learnt from Key stage 1** until the subject areas are covered in Year 3 and 4..

Subject Knowledge Support

White Rose Schemes of Work - [Maths resources for teachers | White Rose Maths](#)

NCETM Subject Knowledge Audits [Primary Subject Knowledge Audit | NCETM](#)

Note: This Medium Term Plan is based on mixed age classes being taught together in one whole class lesson and ensures full coverage of the Years 3 and 4 National Curriculum. If you are separating your class into separate year groups for Maths lessons then please follow the MTPs for those individual year groups.

The lessons and NC statements in **green are from Y3 (see Y3 MTPs and lessons for these). All other lessons and NC statements are Year 4 or are mentioned in both Year 3 and 4 sections of the National Curriculum.**

<u>Autumn</u>			
<u>Place Value (3-4 weeks)</u>	<u>Addition and Subtraction (3-4 weeks)</u>	<u>Geometry properties of shapes (2-3 weeks)</u>	<u>Multiplication and Division (2-3 weeks)</u>
<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ find 10, 100, 1000 more or less than a given number ✓ recognise the place value of each digit in a (three digit number) four-digit number (thousands, hundreds, tens, and ones) ✓ order and compare numbers (up to) beyond 1000 ✓ solve number and practical problems (including missing number problems) that involve all of the above and with increasingly large positive numbers ✓ Count backwards through 0 to include negative numbers. ✓ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. ✓ identify, represent and estimate numbers using different representations (including the number line) ✓ Read and write numbers up to 1000 in numerals and words ✓ round any number to the nearest 10, 100 or 1000 ✓ Count from 0 in multiples of 50 and 100 ✓ count in multiples of 4, 8 6, 7, 9, 25 and 1000 <p>Lesson Sequence:</p> <ol style="list-style-type: none"> 1) L.P: To understand what a number system is. 2) L.P: To read Roman Numerals. 3) L.P: To understand negative numbers. 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> • Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds. • add and subtract numbers with up to (3 digits) 4 digits using the formal written methods of columnar addition and subtraction where appropriate • estimate and use inverse operations to check answers to a calculation (both) • solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why, including missing number problems, using number facts, place value, and more complex addition and subtraction. <p>Lesson Sequence:</p> <ol style="list-style-type: none"> 1. L.P: To solve an addition problem. Reach 100 (maths.org) 2. L.P: To adjust when adding. up to 3 digits. 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ✓ identify right angles (quarter turns), acute and obtuse angles and compare and order angles up to two right angles by size. ✓ Identify horizontal and vertical lines and pairs of perpendicular and parallel lines ✓ identify lines of symmetry in 2-D shapes presented in different orientations ✓ complete a simple symmetric figure with 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ recall multiplication and division facts for multiplication tables up to 12×12. 3, 4 and 8 Times Table. ✓ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers ✓ recognise and use factor pairs and commutativity in mental calculations ✓ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. <p>Lesson Sequence:</p> <ul style="list-style-type: none"> ✓ L.P: To explore multiplication. ✓ L.P: To understand commutativity. ✓ L.P: To use the Distributive Law. ✓ L.P: To explore division. ✓ L.P: To multiply and divide by 3. ✓ L.P: To multiply and divide by 6. ✓ L.P: To multiply and divide by 9. ✓ L.P: To multiply and divide by 3, 6 and 9. <p>Starter - Multiplication Square Jigsaw (maths.org)</p> <ul style="list-style-type: none"> ✓ L.P: To multiply and divide by 7. ✓ L.P: To multiply and divide by 11. ✓ L.P: To multiply and divide by 12.

<p>4) L.P: To partition and recombine numbers. Standard and flexible up to 3 digits.</p> <p>5) L.P: To read and write numbers up to 1000.</p> <p>6) L.P: To represent numbers. up to 4 digits.</p> <p>7) L.P: To partition and recombine numbers. Standard.</p> <p>8) L.P: To partition and recombine numbers. Standard and flexible up to 4 digits.</p> <p>9) L.P: To compare numbers up to 10,000.</p> <p>10) L.P: To order numbers up to 10,000. Explore - Ordering Journeys (maths.org)</p> <p>11) L.P: To add and subtract 10, 100 and 1,000. Explore - What Distance? (maths.org) DC - The Deca Tree Poster (maths.org)</p> <p>12) L.P: To interpret a numberline. up to 3 digits.</p> <p>13) L.P: To interpret a numberline. up to 4 digits.</p> <p>14) L.P: To round to the nearest 10. Explore - Reasoned Rounding (maths.org)</p> <p>15) L.P: To round to the nearest 100.</p> <p>16) L.P: To round to the nearest 1000.</p> <p>17) L.P: To round to the nearest 10, 100 and 1,000.</p> <p>18) L.P: To apply rounding skills.</p> <p>Use starters and opportune times to look at patterns and rehearse counting in multiples of 50, 100, 4, 8, 6, 7, 9, 25 and 1000.</p>	<p>3. L.P: To adjust when adding. up to 4 digits.</p> <p>4. L.P: To add using the compact method. (practical lesson in mixed attainment partners on A3 or sugar paper) up to 3 digits. Starter: adding ones to a 3 digit number.</p> <p>5. L.P: To add using the compact method. up to 3 digits. Starter: adding tens to a 3 digit number.</p> <p>6. L.P: To add using the compact method. up to 4 digits with 100s to 1000 exchange only. Starter: adding hundreds to a 3 digit number.</p> <p>7. L.P: To add using the compact method. (practical lesson in mixed attainment partners on A3 or sugar paper) up to 4 digits with multiple exchanges.</p> <p>8. L.P: To add using the compact method. up to 4 digits with multiple exchanges.</p> <p>9. L.P: To add using the most efficient method.</p> <p>10. L.P: To solve an addition and subtraction problem. Maze 100 (maths.org)</p> <p>11. L.P: To subtract using adjusting. up to 3 digits.</p> <p>12. L.P: To subtract using adjusting. up to 4 digits.</p>	<p>respect to a specific line of symmetry.</p> <p>✓ draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.</p> <p>Lesson Sequence:</p> <p>1. L.P: To name, sort and compare 2D shapes.</p> <p>Vertices and sides. Not yet planned.</p> <p>2. L.P: To draw 2D polygons.</p> <p>3. L.P: To name, sort and compare 3D shapes.</p> <p>Vertices and edges. Not yet planned.</p> <p>4. L.P: To make 3D shapes.</p> <p>Not yet planned.</p> <p>5. L.P: To identify, name and order angles.</p> <p>Starter: horizontal and vertical lines. Plenary: Perpendicular lines.</p> <p>6. L.P: To identify regular and irregular shapes. Starter: Parallel lines.</p> <p>7. L.P: To identify lines of symmetry. Explore - Let Us Reflect (maths.org)</p>	<p>✓ L.P: To use the Associative Law.</p> <p>✓ L.P: To multiply by 4. Y4 - L.P: To apply multiplication knowledge. Multiples Grid (maths.org)</p> <p>✓ L.P: To multiply by 8. Y4 - L.P: To find all possibilities. Zios and Zepts (maths.org)</p> <p>Use starters and opportune times to look at the 4 and 8 times tables.</p>
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	<p>13. L.P: To subtract using the compact method. (practical lesson in mixed attainment partners on A3 or sugar paper) up to 3 digits. Starter: subtracting ones from a 3 digit number.</p> <p>14. L.P: To subtract using the compact method. up to 3 digits. Starter: subtracting tens from a 3 digit number.</p> <p>15. L.P: To subtract using the compact method. up to 4 digits with 1000 to 100s exchange only. Starter: subtracting hundreds from a 3 digit number.</p> <p>16. L.P: To subtract using the compact method. (practical lesson in mixed attainment partners on A3 or sugar paper) up to 4 digits with multiple exchanges.</p> <p>17. L.P: To subtract using the compact method. up to 4 digits with multiple exchanges.</p> <p>18. L.P: To subtract using the most efficient method.</p> <p>19. L.P: To use the inverse operation.</p> <p>20. L.P: To use the inverse operation.</p>	<p>8. L.P: To explore symmetry. Symmetry Challenge (maths.org)</p> <p>9. L.P: To complete a symmetrical figure.</p> <p>10. L.P: To identify types of triangles.</p> <p>11. L.P: To sort triangles. Using angles, symmetry, parallel, perpendicular, horizontal and vertical lines.</p> <p>12. L.P: To identify types of quadrilaterals. Explore - Stringy Quads (maths.org)</p> <p>13. L.P: To sort quadrilaterals. Using angles, symmetry, parallel, perpendicular, horizontal and vertical lines. Explore - Quad Match (maths.org)</p>	
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Spring			
<p>Multiplication and Division (2-3 weeks) Start all together and then split where needed. Lessons to consider splitting where Y3 spend longer on the previous lesson.</p>	<p>Measurement - Area and Perimeter (2-3 weeks) All can do together.</p>	<p>Fractions (3-4 weeks) Start all together and then split where needed. Lessons to consider splitting where Y3 spend longer on the previous lesson, or the lesson stated underneath in green.</p>	<p>Decimals (1 - 2 weeks) All can do together but Year 3s can do more on tenths if hundredths seem too much.</p>
<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ recall multiplication and division facts for multiplication tables up to 12×12 ✓ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers ✓ recognise and use factor pairs and commutativity in mental calculations ✓ multiply two-digit and three-digit numbers by a one-digit number using formal written layout ✓ Write and calculate mathematical statements for multiplication and division using multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ✓ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. <p>Lesson sequences:</p> <ol style="list-style-type: none"> 1. LP: To identify factor pairs. 2. LP: To multiply by 1 and 0. 3. LP: To multiply by 10. 4. LP: To multiply by 100. 5. LP: To multiply by 10 and 100. 6. LP: To divide by 10. 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ✓ find the area of rectilinear shapes by counting squares <ol style="list-style-type: none"> 1. LP: To understand area. (Practical lesson) 2. LP: To calculate the area. (Counting squares) 3. LP: To make shapes. 4. LP: To compare areas. 5. LP: To understand perimeter. (Practical lesson) 6. LP: To calculate the perimeter on a grid. 7. LP: To calculate the perimeter of a rectangle. 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ recognise and show, using diagrams, families of common equivalent fractions ✓ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ✓ solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number ✓ add and subtract fractions with the same denominator ✓ solve simple measure and money problems involving fractions and decimals to two decimal places. <p>Lesson Sequence:</p> <ol style="list-style-type: none"> 1. LP: To explore fractions. (Practical lesson) 2. LP: To recap prior learning. (Understanding equal parts and parts of a fraction) 3. LP: To find fractions of an amount. 4. LP: To find non-unit fractions of an amount. 5. LP: To consolidate finding fractions and non-unit fractions of an amount. 6. LP: To recognise equivalent fractions on a number line (and/or fraction wall). 7. LP: To recognise equivalent fraction families. 8. LP: To simplify fractions. Equivalent using bar models 9. LP: To compare and order fractions. 10. LP: To count beyond a whole. Compare and order by Numerator. 	<p>National Curriculum Statements:</p> <ul style="list-style-type: none"> ✓ recognise and write decimal equivalents of any number of tenths or hundredths ✓ recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ <p>Lesson sequences:</p> <ol style="list-style-type: none"> 1. LP: To understand tenths as a fraction. 2. LP: To understand tenths as a decimal. 3. LP: To understand hundredths as a fraction. 4. LP: To understand hundredths as a decimal. 5. To recognise and write decimals equivalent to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$.0.

<p>7. LP: To divide by 100.</p> <p>8. LP: To divide by 10 and 100. Y3 just divide by 10.</p> <p>9. L.P: To multiply multiples of 10.</p> <p>10. LP: To multiply multiples of 100.</p> <p>11. LP: To use short multiplication. (2-digit by 1)</p> <p>12. LP: To use short multiplication. (2-digit by 1)</p> <p>13. LP: To use short multiplication. (3-digit by 1)</p> <p>14. LP: To use short multiplication. (3-digit by 1)</p> <p>15. L.P: To use short multiplication (intervention lesson).</p> <p>16. To use the most efficient method to multiply</p> <p>Year 3 only do methods taught.</p> <p>17. LP: To divide a 2-digit by 1-digit. Short Division no exchange</p> <p>18. LP: To divide a 3-digit by 1-digit. No exchange – layout focus</p> <p>19. LP: To divide a 3-digit by 1-digit. Exchange 1 for 10 only.</p> <p>20. LP: To divide a 3-digit by 1-digit.</p> <p>21. LP: To divide a 3-digit by 1-digit.</p> <p>22. LP: To divide a 3-digit by 1-digit. Intervention lesson.</p> <p>For the lessons above use Y3 lessons on flexible partitioning.</p> <p>23. L.P: To use the most efficient method to multiply and divide.</p> <p>24. L.P: To solve multiplication and division word problems.</p> <p>25. L.P: To solve correspondence problems.</p>	<p>8. LP: To calculate the perimeter of a rectilinear shape. (Start on grid before moving on)</p> <p>9. LP: To find the missing lengths in rectilinear shapes.</p> <p>10. LP: To calculate the perimeter of regular polygons.</p>	<p>11. LP: To understand improper fractions.</p> <p>12. LP: To convert improper fractions to mixed numbers. Compare and order by Denominator.</p> <p>13. LP: To add and subtract fractions within 1.</p> <p>14. LP: To add fractions beyond 1.</p> <p>15. LP: To subtract fraction from a whole. Partition the whole.</p> <p>16. LP: To subtract fractions beyond 1.</p> <p>17. LP: To apply knowledge of fractions. (Problem solving- could be an NRICH task)</p> <p>18. Opportunity to revisit any misconceptions.</p> <p>19. Opportunity to revisit any misconceptions.</p> <p>20. Opportunity to revisit any misconceptions.</p>	
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Summer				
<u>Decimals (1 – 2 Weeks)</u>	<u>Measure – Money, Length Mass and Capacity (2-3 weeks)</u>	<u>Measure – Time (1-2 weeks)</u>	<u>Statistics (1 – 2 Weeks)</u>	<u>Geometry (Position and direction) (1-2 weeks)</u>
<p><u>National Curriculum Statements:</u></p> <ul style="list-style-type: none"> ✓ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ✓ round decimals with one decimal place to the nearest whole number ✓ compare numbers with the same number of decimal places up to two decimal places 	<p><u>National Curriculum Statements:</u></p> <ul style="list-style-type: none"> ✓ estimate, compare and calculate different measures, including money in pounds and pence. ✓ Convert between different units of measure [for example, kilometre to metre; hour to minute] ✓ estimate, compare and calculate different measures, including money in pounds and pence. 	<p><u>National Curriculum Statements:</u></p> <ul style="list-style-type: none"> ✓ read, write and convert time between analogue and digital 12- and 24-hour clocks ✓ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. 	<p><u>National Curriculum Statements:</u></p> <ul style="list-style-type: none"> ✓ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ✓ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. 	<p><u>National Curriculum Statements:</u></p> <ul style="list-style-type: none"> ✓ describe positions on a 2-D grid as coordinates in the first quadrant ✓ describe movements between positions as translations of a given unit to the left/right and up/down ✓ plot specified points and draw sides to complete a given polygon.