Maths Medium Term Overview - Year 3 \& Year 4
AUTUMN TERM

| WEEK 1 |  |  |  |
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| Time - 1 Week |  |  |  |
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| WEEK 2 |  |  |  |
| Number and Place Value - $311 / 2$ Weeks |  |  |  |
| Unit 1 Place Value within 1,000 |  | Unit 1 Place Value - 4-digit numbers (1) |  |
| L1 Represent and partition numbers to 100 | Represent and partition numbers to 100 using a variety of representations | L1 Represent and partition numbers to 1,000 | Represent 3-digit numbers in a variety of ways Identify the value of each digit |
| L2 Number line to 100 | Identify and label numbers within 100 on a number line | L2 Number line to 1,000 | Label intervals Recognise and place given numbers on number lines |
| L3 100s | Count in 100s from 0 to 1,000 forward and backwards Understand what 100 is and the different ways of representing it Write the numbers in both numerals and words | L3 Multiples of 1,000 | Count in 1,000 s from 0 to 10,000, forwards and backwards Recognise multiples of 1,000 in different representations |
| L4 Represent numbers to 1,000 | Identify and represent numbers using place value grids and counters | L4 4-digit numbers | Identify the value of each digit in a 4-digit number |
| L5 Partition numbers to 1,000 | Use base 10 equipment and part-whole models to represent numbers to 1,000 <br> Understand that a number up to 1,000 is made up of some 100 s , some 10 s and some 1 s | L5 Partition 4-digit numbers | Partition and recombine 4-digit numbers into $1,000 \mathrm{~s}, 100 \mathrm{~s}, 10 \mathrm{~s}$ and 1 s |
| WEEK 3 |  |  |  |
| L6 Partition numbers to 1,000 flexibly | Recognise that a 3-digit number can be partitioned in different ways | L6 Partition 4-digit numbers flexibly | Explore partitioning 4-digit numbers in various ways |
| L7 100s, 10s and 1s | Identify and represent numbers in place value grids using counters | L8 1,000s, 100s, 10s and 1s (moved) | Further develop an understanding of the relationship between 1,000s, 100s, 10s and 1s <br> Convert numbers such as 1,400 into 14 hundreds or 140 tens |
| L10 1, 10, 100 more or less (moved) | Find 1, 10 and 100 more or less than a given number (including cases that involve an exchange) Recognise which digit(s) will change | L7 1, 10, 100, 1,000 more or less | Find 1, 10, 100 and 1,000 more or less than a given number in a range of contexts Recognise which digit(s) will change |
|  |  | Unit 1 Place Value - 4-digit numbers (2) |  |
| L8 Use a number line to 1,000 | Work out whether a number line goes up in 100s, 10s or 1 s Identify values and mark points on number lines that go up in $100 \mathrm{~s}, 10 \mathrm{~s}$ and 1 s | L1 Number line to 10,000 | Locate and identify multiples of $1,000,100$ and 10 on number lines |
| Between two multiples | Identify the previous and next multiple of 100 or 10 , that come before and after a given number up to 3-digits. | L2 Between two multiples | Identify the previous and next multiple of $1,000,100$ or 10 , that come before and after a given number up to 4- digits. |
| WEEK 4 |  |  |  |
| L9 Estimate on a number line to 1,000 | Identify numbers that lie between two points on a number line. | L3 Estimate on a number line to 10,000 | Estimate the location of numbers on a number line |
| L11 Compare numbers to 1,000 | Compare two 3-digit numbers using <, > and = signs | L4 Compare and order numbers to 10,000 | Order 4-digit numbers, focusing on the value of the digits using a place value grid to support understanding. |


| L12 Order numbers to 1,000 | Order three or more 3-digit numbers | L5 Round to the nearest 1,000 | Round 4-digit numbers to the nearest 1,000 |
| :---: | :---: | :---: | :---: |
| Round to the nearest 100 | Round 3- numbers to the nearest 100 | L6 Round to the nearest 100 | Round 3 - and 4 -digit numbers to the nearest 100 |
| Round to the nearest 10 | Round 2-digit numbers to the nearest 10 | L7 Round to the nearest 10 | Round any 2-, 3- or 4-digit number to the nearest 10 |
| WEEK 5 |  |  |  |
| Round to the nearest 100 or 10 | Round 3-digit numbers to the nearest 100 or 10. | L8 Round to the nearest 1,000, 100 or 10 | Apply knowledge of rounding to the nearest 10, 100 and 1,000 to answer a variety of problems |
| L13 Count in 50s | Count on and back in 50s from 0 to 1,000 <br> Count from any multiple of 50 | Count in 50s | Count on and back in 50s from any multiple of 50 . <br> Work out how many 50s there are in a number |
| Addition and Subtraction |  |  |  |
| Unit 2 Addition and Subtraction (1) |  | Unit 3 Addition and Subtraction |  |
| L2 Add/subtract 1s L3 Add/subtract 10s | Add and subtract a 1-digit number to and from a 3-digit number, (not crossing 10s) Add and subtract a 10 s to and from a 3-digit number, (not crossing 100s) | Add/subtract 1s, 10s | Apply my understanding of place value to quickly make mental calculations when adding and subtracting 1s, 10s (not crossing 10s/100s) <br> Use this to solve problems |
| L4 Add/subtract 100s | Add and subtract a 100 s to and from a 3-digit number | L1 Add and subtract 1s, 10s, 100s, 1,000s | Use my knowledge of place value to add and subtract 1,10 , 100 and 1,000 to and from 4digit numbers (not crossing multiples of ten) |
| L6 Add 1s across 10 | This is the first time Y3s have seen addition in columns. (No longer taught in Y 2 at the moment) <br> Recognise when an addition will cross a 10. <br> Add a 1-digit number to a 3-digit number by exchanging 10 ones for 1 ten when required. Demonstrate my understanding using base 10/place value counters | Add 1s across 10 <br> Or something else the children need to recap/ consolidate. | Recap lesson <br> Mental fluency |
| WEEK 6 |  |  |  |
| L7 Add 10s across 100 | Recognise when an exchange of 10 tens for 1 hundred is needed. Add multiples of 10 s to a 3-digit number. <br> Demonstrate my understanding using base 10/place value counters | Add 10s across 100 <br> Or something else the children need to recap/ consolidate. | Recap lesson <br> Mental fluency |
| L1 Add two numbers (from Unit 3) | Use column method to add 3digit numbers (no exchange) | L2 Add two 4-digit numbers - no exchange | Add 4-digit numbers using the column method (without exchanging) |
| L3 Add two numbers (across 10) (from Unit 3) | Use column method to add two 3-digit numbers where exchange may be necessary, and to recognise when it is or is not necessary | L3 Add two 4-digit numbers - one exchange | Add 4-digit numbers using the column method with an exchange in one column |
| L4 Add two numbers (across 100) (from Unit 3) | Use column method to add 3digit numbers where exchanges may be necessary in the $1 \mathrm{~s}, 10$ s or both | L4 Add with more than one exchange | Add 4-digit numbers using the column method with exchanges across more than one column |
| L2 Subtract two numbers (from Unit 3) | Use column method to subtract 3-digit numbers (no exchange) | L5 Subtract two 4-digit numbers | Subtract 4-digit numbers using the column method (no exchanges) |
| WEEK 7 |  |  |  |
| L8 Subtract 1s across 10 <br> NB don't get confused between using a number line and column | Understand how to exchange 1 ten for 10 ones. <br> Use exchange of 1 ten for 10 ones to subtract a 1-digit | L6a Subtract two 4-digit numbers one exchange | Subtract 4-digit numbers using the column method where an exchange is required |


| subtraction. This lesson is about using a number line but explaining what is happening by using base 10 . | number from a 3-digit number where the subtraction crosses a 10 <br> Demonstrate my understanding using a number line. |  |  |
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| L9 Subtract 10s across 100 | Subtract a multiple of 10 from a 3-digit number, including where an exchange of 1 hundred for 10 tens is required. <br> Demonstrate my understanding using base 10 | L6b Subtract two 4-digit numbers one exchange | Subtract 4-digit numbers using the column method where an exchange is required |
| Unit 3 Addition and Subtraction (2) |  |  |  |
| L5a Subtract two numbers (across 10) | Subtract 3-digit numbers using the column method where exchange is necessary across 10 | L7a Subtract two 4-digit numbers <br> - more than one exchange | Subtract 4-digit numbers using the column method where more than one exchange is required. |
| L5b Subtract two numbers (across 10) | Subtract 3-digit numbers using the column method where exchange is necessary across 10 | L7b Subtract two 4-digit numbers <br> - more than one exchange | Subtract 4-digit numbers using the column method where more than one exchange is required. |
| L6a Subtract two numbers (across 100) | Subtract 3-digit numbers using the column method where exchange is necessary across 100 | L8a Exchange across two columns | Subtract 4-digit numbers using the column method with exchanges, when there is a zero in the column to be exchanged from |
| WEEK 8 |  |  |  |
| L6b Subtract two numbers (across 100) | Subtract 3-digit numbers using the column method where exchange is necessary across 100 <br> Represent column subtractions involving exchange across one or two columns | L8b Exchange across two columns | Subtract 4-digit numbers using the column method with exchanges, when there is a zero in the column to be exchanged from |
| L7 Add a 3-digit and 2-digit number | Add a 3-digit and a 2-digit number using a written column method where exchange is needed. | Consolidation |  |
| L8 Subtract a 2-digit number from a 3-digit number | Subtract a 2-digit number from a 3-digit number using the column method where exchange is needed. | L9 Efficient methods | Choose the most appropriate calculation method to use |
| L10 Estimate answers | Use a rough approximation to estimate answers to calculations by adding 100s mentally NB Y3s have learnt rounding so could apply their rounding to 100 skills. | L11 Estimate answers | Make choices about whether to round to the nearest 10,100 or 1,000 <br> Use this to make estimates and decide if a calculation is reasonable. |
| L11 Inverse operations | Use inverse operations and fact families as checking strategies | L12 Check strategies | Use inverse operations to check answers to a calculation Understand that there is more than one way to check an answer (inverse, rounding, repetition) |
| WEEK 9 |  |  |  |
| Multiplication and Division |  |  |  |
| Unit 4 Multiplication and Division (1) |  | Unit 5 Multiplication and Division (1) |  |
| L1 Multiplication - equal groups | Recognise equal groups Write down the associated multiplication fact for equal groups | Multiplication - equal groups | Recap |
| L2 Use arrays | make and use arrays to represent multiplication sentences Understand that multiplication is commutative | Use arrays | Find two multiplication sentences for each array Find two division sentences for each array |
| L3 Multiples of 2 | Identify multiples of 2 <br> Decide whether a given number is or is not a multiple of 2 | Multiples of 2 | Reason with multiples of 2 |
| L4 Multiples of 5 and 10 | Identify multiples of 5 and multiples of 10 | Multiples of 5 and 10 | Reason with multiples of 5 and 10 |


|  | Decide whether or not a given number is a multiple of 5 or 10 |  |  |
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| L5 Sharing and grouping | Answer sharing and grouping division questions | Sharing and grouping | Understand that sharing and grouping are both types of division and will give the same answer. |
| WEEK 10 |  |  |  |
| Unit 4 Multiplication and Division (2) |  |  |  |
| L1 Multiply by 3 | Understand what it means to multiply by 3 <br> Understand the link between repeated addition, counting up in 3 s and multiplying by 3 | L2a Multiply and divide by 6 | Understand what it means to multiply and divide by 6 Use a range of strategies to demonstrate understanding |
| L2 Divide by 3 | Understand what it means to divide by 3 <br> Understand that a division sentence can be used to represent either equal grouping or sharing | L2b Multiply and divide by 6 | Understand what it means to multiply and divide by 6 Use a range of strategies to demonstrate understanding |
| L3 The 3 times-table | Develop recall of multiplication facts and associated division facts for the 3 times-table | L3 6 times-table and division facts | Develop recall of multiplication facts and associated division facts for the 6 times-table |
| L4 Multiply by 4 | Understand what it means to multiply by 4 <br> Understand the link between repeated addition, counting up in 4 s and multiplying by 4 | L4a Multiply and divide by 9 | Understand what it means to multiply and divide by 9 Use a range of strategies to demonstrate understanding |
| L5 Divide by 4 | Understand what it means to divide by 4 <br> Understand that a division sentence can be used to represent either equal grouping or sharing | L4b Multiply and divide by 9 | Understand what it means to multiply and divide by 9 Use a range of strategies to demonstrate understanding |
| WEEK 11 |  |  |  |
| L6 The 4 times-table | Develop recall of multiplication facts and associated division facts for the 4 times-table | L5 9 times-table and division facts | Develop recall of multiplication facts and associated division facts for the 9 times-table |
| L7 Multiply by 8 | Understand what it means to multiply by 8 <br> Understand the link between repeated addition, counting up in 3 s and multiplying by 8 | L7a Multiply and divide by 7 | Understand what it means to multiply and divide by 7 Use a range of strategies to demonstrate understanding |
| L8 Divide by 8 | Understand what it means to divide by 8 Understand that a division sentence can be used to represent either equal grouping or sharing | L7b Multiply and divide by 7 | Understand what it means to multiply and divide by 7 Use a range of strategies to demonstrate understanding |
| L9 The 8 times-table | Develop recall of multiplication facts and associated division facts for the 8 times-table | L8 7 times-table and division facts | Develop recall of multiplication facts and associated division facts for the 7 times-table |
| L10 Problem solving - multiplication and division (1) | Solve simple one-step multiplication and division problem <br> Draw a simple bar model to represent the problem | L6 The 3, 6 and 9 times-tables (moved) | Explore the relationship between multiples of 3 , multiples of 6 and multiples of 9 |
| WEEK 12 - HODDER TEST WEEK |  |  |  |
| L11 Problem solving - multiplication and division (2) | Begin to tackle simple two- and three-step multiplication and division problems Draw a bar model to represent the problem | L9 11 and 12 times-tables and division facts | Develop recall of multiplication facts and associated division facts for the 11 and 12 timestable |
| Multiply by 1 and 0 | Explore what happens when you multiply numbers by 0 and 1 | L10 Multiply by 1 and 0 | Multiply numbers by 0 and 1 |
| Divide by 1 and itself | Explore what happens when you divide a number by 1 or by itself | L11 Divide by 1 and itself | Divide numbers by 1 Divide a number by itself |
| Consolidation |  | Consolidation |  |


| Consolidation |  | Consolidation |  |
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| WEEK 13 |  |  |  |
| Multiply three numbers | Explore the commutative and associative properties of multiplication and how this can be used to make multiplying three numbers easier | L12 Multiply three numbers | Use the properties of multiplication (commutativity, associative) to recognise the most efficient way to multiply three numbers. |
| L12 Understand divisibility (1) | Understand that some division problems leave a remainder Begin to understand that the greatest possible remainder is 1 less than the number they are dividing by | Consolidation |  |
| L13 Understand divisibility (2) | Begin to identify when a division will result in a remainder. Calculate a division with a remainder and write it in the form 'a remainder b' | Consolidation |  |
| Multiples of 3 | Begin to identify numbers that are multiples of 3 | L1 Multiples of 3 (moved) | Name and identify numbers that are multiples of 3 . <br> Understand that multiplication is commutative and division is not commutative. <br> Write the multiplication and division fact families for multiples of 3 . |
| Consolidation |  | Consolidation |  |
| Lessons that need a home - Use as consolidation lessons or in Summer2 |  |  |  |
| L1 Apply number bonds within 10 (from unit 2) |  | L10 Equivalent difference (from Unit 3) | Understand the equivalent difference strategy and can apply it when solving problems |
| L5 Spot the pattern (from unit 2) | Missing number problems (multiples of 10 only) | L13 Problem solving - one step (from Unit 3) |  |
| L10 Making connections (from unit 2) | Mental strategies | L14 Problem solving - comparison (from Unit 3) |  |
| L9 Complements to 100 (from unit 3) |  | L15 Problem solving - two steps (from Unit 3) |  |
| L12 Problem solving (1) from Unit 3) |  | L16 Problem solving - multi-step Problems (from Unit 3) |  |
| L13 Problem solving (2) from Unit 3) |  |  |  |
|  |  |  |  |

## SPRING TERM

| WEEK 1 |  |  |  |
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| Multiplication and Division - 5 Weeks |  |  |  |
| Unit 6 Multiplication and Division (3) |  | Unit 6 Multiplication and Division (2) |  |
| L1 Multiples of 10 | Find multiples of 10 <br> Recognise 2-and 3-digit numbers that are multiples of 10. <br> (leading onto multiplying by 10 ) | Multiples of 10 | Recap lesson |
| Multiply by 10 | Explore what happens to the place value of the digits in a number when it is multiplied by 10 | L2 Multiply and divide by 10 | Explore what happens to the place value of the digits in a number when it is multiplied or divided by 10 |
| Divide by 10 | Explore what happens to the place value of the digits in a number when it is divided by 10 | L3 Multiply and divide by 100 | Multiply and divide numbers by 100 <br> Explain understanding using knowledge of place value. |
| L2 Related calculations | multiply by multiples of 10 using known facts and place value knowledge. E.g. $2 \times 3=6$ so $2 \times$ $30=60$ | L4 Related facts - multiplication | multiply by multiples of 10 and 100 using known facts and place value knowledge. |
| WEEK 2 |  |  |  |


| Related calculations - division | Divide by multiples of 10 using known facts and place value knowledge. | L5 Related facts - division | Divide by multiples of 10 and 100 using known facts and place value knowledge. |
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| Multiply and add | Discover that multiplying a number by two numbers added together is the same as doing separate multiplications and then adding the answers (known as the distributive law). | L6 Multiply and add | Discover that multiplying a number by two numbers added together is the same as doing separate multiplications and then adding the answers (known as the distributive law). |
| L4 Multiply 2-digits by 1-digit - no exchange | Use the expanded method to solve 2-digit numbers multiplied by 1-digit numbers | L7 Informal written methods | Use an expanded method to multiply a 2-digit number by a 1digit number |
| L5 Multiply 2-digits by 1-digit - exchange | Use the expanded method to multiply a 2-digit number by a 1 digit number involving grouping and exchange | L8 Multiply 2 digits by 1 digit | use a formal written method to multiply a 2-digit number by a 1digit number (expanded or column) |
| L6 Expanded written method | Use the expanded method of multiplication in written column format <br> Place digits in columns and multiplying in steps before adding columns of digits Be able to explain methods and reasoning. | L9 Multiply 3 digits by 1 digit | use a formal written method to multiply a 3-digit number by a 1digit number (expanded or column) |
| WEEK 3 |  |  |  |
| L3 Reasoning about multiplication (moved) | Compare multiplication statements using the < and > signs. | L10 Solve multiplication problems | Solve a mixture of problems by using the formal written method Draw a bar model to represent the problem |
| L7 Link multiplication and division | Explore the link between multiplication and division Write down related division facts for a given multiplication fact and vice versa. | L1 Factor pairs (moved) | Find and compare factor pairs of numbers |
| L8 Divide 2-digits by 1-digit - no exchange | Use an understanding of place value and partitioning to divide a 2-digit number by a 1-digit number | L11 Basic division | Focus on dividing a 2-digit number where the 10s digit and the 1 s are divisible by the divisor (for example, 96 divided by 3,48 divided by 4,55 divided by 5). |
| L9 Divide 2-digits by 1-digit flexible partitioning | Partition a number using exchange if necessary to divide 2-digit numbers by 1-digit numbers | L13 Divide 2-digit numbers (moved) | Divide a 2-digit number by a 1digit number using flexible partitioning and by focusing on mental methods. |
| L10 Divide 2-digits by 1-digit with remainders | Understand that some division calculations have a remainder Use concrete and pictorial methods to determine the remainder | L12 Division and remainders | Recap the concept of remainders in division Solve division problems that leave a remainder. |
| WEEK 4 |  |  |  |
| Consolidation |  | L14 Divide 3-digit numbers | Use partitioning to divide a 3-digit number by a 1digit number |
| Length and Perimeter |  |  |  |
| Unit 7 Length and Perimeter |  | Unit 7 Length and Perimeter |  |
| L1 \& L2 Measure in $m$ and cm Measure in cm and mm |  | Measure in $\mathrm{m}, \mathrm{cm}$, mm | Recap |
| L3 Metres, cm and mm |  | L1 Measure in km and m |  |
| L4 Equivalent lengths ( m and cm ) |  | Equivalent lengths | Problem solving using equivalent lengths |
| L5 Equivalent lengths ( mm and cm ) |  | Equivalent lengths | Problem solving using equivalent lengths |
| WEEK 5 |  |  |  |
| L6 Compare lengths |  | Consolidation | Problem solving using 4 opps and length. |


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SUMMER



