# LYtCHEtt MAtRAVERS <br> Primaru sctiol 

## EYFS to Year 6 Long Term Plan

'Mathematics is not about numbers, equations, computation or algorithms; it is about understanding' William Paul Thurston

## Intent

At Lytchett Matravers Primary School, we aim to produce confident learners who are able to see and make connections between the different areas of Mathematics. Our children will be able to confidently solve problems, reason mathematically and successfully perform investigations by drawing upon the mathematical experiences and knowledge gained through a rich, broad and exciting mathematics curriculum. Mathematical learning at LMPS will allow children to deepen their understanding and master key concepts. Mathematics is a key life skill which equips our children for their future. We encourage the children to develop these key and fundamental skills through their growing knowledge and understanding of the world.

At LMPS, we aim to achieve mastery through a mastery approach: a set of principles and beliefs. This includes a belief that all pupils are capable of understanding and doing mathematics, given sufficient time. With good teaching, appropriate resources, effort and a 'can do' attitude, all children can achieve in and enjoy mathematics. A mastery curriculum is one set of mathematical concepts and big ideas for all. All pupils need access to these concepts and ideas and to the rich connections between them. Teaching for mastery is a set of pedagogic practices that keep the class working together on the same topic, whilst at the same time addressing the need for all pupils to master the curriculum and for some to gain greater depth of proficiency and understanding. Challenge is provided by going deeper rather than accelerating into new mathematical content.

We achieve this by;
$\diamond$ using active and involving teaching approaches;
$\diamond$ actively encouraging reflection on learning;
$\diamond$ using rich questioning and discussion;
$\diamond$ taking time over each new concept;
$\diamond$ focusing on using and applying skills in order to extend mathematical knowledge;
$\diamond$ identifying misconceptions as starting places for concept building;
$\diamond$ being responsive to the needs of each pupil and allowing additional time before moving on when required;
$\diamond$ ensuring that children enjoy challenging maths;
$\diamond$ encouraging pupils to use a range of independent learning strategies.

## Ready to Progress Criteria

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1017683/Maths_guidance_KS_1_and_2.pdf

## NCETM PD Materials

$\diamond$ Spine 1: Addition and Subtraction www.ncetm.org.uk/media/nbyc314a/ncetm_mm_sp1_overview.pdf
$\diamond$ Spine 2: Multiplication and Division www.ncetm.org.uk/media/5hxifisl/ncetm_spine2_overview.pdf
$\diamond$ Spine 3: Fractions www.ncetm.org.uk/media/q34pxqgt/ncetm_spine3_overview.pdf

## NCETM Mastery Materials

www.ncetm.org.uk/teaching-for-mastery/mastery-materials/

## White Rose Maths

Primary Scheme of Work www.whiterosemaths.com/resources/primary-resources/primary-sols/
Click the link to access our mathematics curriculum area on the school website:

| Lytch | ol Mathematics Long Term Planning | S West 2021 |
| :---: | :---: | :---: |
|  | EYFS Long Term Planning | *ELGs highlighted in yellow |
| Number and Place Value | $\diamond$ Recognises numerals of personal significance <br> Recognises numerals 1-5 <br> Counts up to 3 or 4 objects saying one number names for each item <br> Counts actions or objects that cannot be moved <br> Counts objects to 10 and beyond 10 <br> Counts out up 6 objects from a larger group <br> Selects the correct numeral to represent 1-5 and 1-10 objects <br> Counts irregular arrangement of up to 10 objects <br> Estimate how many objects and checks by counting <br> Says the number that is one more than a given number. <br> Records using marks that they can interpret and explain <br> Counts reliably from 1-20 <br> Place numbers in order saying 1 more or 1 less than a given number |  |
| Addition and Subtraction | - Uses language such as more or fewer to compare objects <br> - Finds the total number of items in2 groups by counting all of them <br> - Finds one more or one less than a group of up 5 objects then 10 objects. <br> - In practical activities and discussion beginning to use the vocabulary involved in adding and subtracting <br> - Begins to identify own mathematical problems based on own interests. <br> - Using quantities or objects they add or subtract 2 single digit numbers and count on or back to find the answer. |  |
| Fractions | They solve problems including doubling, halving and sharing. |  |
| Measurement | - Orders 2 or 3 items by length or height <br> - Orders 2 items by weight or capacity <br> - Uses everyday language relating to time. <br> - Uses everyday language relating to money <br> - Orders and sequenced familiar events <br> - Measure short periods of time in simple ways <br> Estimate a number of objects and check quantities by counting up to 20. |  |
| Geometry | - Beginning to use the mathematical names for solid 3D shapes and flat 2D shapes <br> - Selects a particular named shape <br> - Can describe the relative position such as behind or next to <br> - Uses familiar objects and common shapes to create and recreate patterns and build models <br> - They recognise, create and describe patterns <br> - Explore characteristic of everyday objects and shapes and use mathematical language to describe them. |  |

## Year 1

Year 1 AUTUMN Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-1-Full-Autumn-Term.pdf

|  | Week 1 $\quad$ Week 2 $\quad$ Week 3 $\quad$ Week 4 | Week 5 $\quad$ Week 6 $\quad$ Week 7 $\quad$ Week 8 | Week 9 | Week 10 Week 11 | Week 12 |
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| 듣 | Number: Place Value (within 10) <br> WRSS: 15 <br> - Sort objects <br> - Count objects <br> - Represent objects <br> - Count, read and write forwards from any number 0 to 10 <br> - Count, read and write backwards from any number <br> 0 to 10 <br> - Count one more <br> - Count one less <br> - One-to-one correspondence to start to compare groups <br> - Compare groups using language such as equal, more/ greater, less/ fewer Introduce and = symbols <br> - Compare numbers <br> - Order groups of objects <br> - Order numbers <br> - Ordinal numbers (1st, 2nd, 3rd ...) <br> - The number line <br> Ready to Progress Criteria <br> 1NPV-1: Count within 100, forwards and backwards, starting with any number. <br> 1NPV-2: Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.1 Comparison of quantities/measures <br> 1.3 Composition of numbers 1-5 <br> 1.4 Composition of numbers 6-10 | Number: Addition and Subtraction (within 10) <br> WRSS: 18 <br> - Part-whole model <br> - Addition symbol <br> - Fact families - addition facts <br> - Find number bonds for numbers within 10 <br> - Systematic methods for number bonds within 10 <br> - Number bonds to 10 <br> - Compare number bonds <br> - Addition - adding together <br> - Addition - adding more <br> - Finding a part <br> - Subtraction - taking away, how many left? <br> - Crossing out <br> - Subtraction - taking away, how many left? <br> - Introducing the subtraction symbol <br> - Subtraction - finding a part, breaking apart <br> - Fact families - the 8 facts <br> - Subtraction - counting back <br> - Subtraction - finding the difference <br> - Comparing addition and subtraction statements a + b > <br> C <br> - Comparing addition and subtraction statements $a+b$ > c + d <br> Ready to Progress Criteria <br> 1NF-1: Develop fluency in addition and subtraction facts within 10. <br> 1AS-1: Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. <br> 1AS-2: Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.2 'Whole' and 'Parts': part-part-whole <br> 1.5 Introduction to aggregation and partitioning <br> 1.6 Introduction to augmentation and reduction <br> 1.7 Addition and Subtraction: Strategies within 10 | Geometry: Shape WRSS: 5 <br> - Recognise/ name 3D shapes <br> - Sort 3D shapes <br> - Recognise and name <br> 2-D shapes <br> - Sort 2-D shapes <br> - Patterns with 3-D and <br> 2-D shapes <br> Ready to Progress <br> Criteria <br> 1G-1: Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another | Number: Place Value (within 20) <br> WRSS: 8 <br> - Count forwards and backwards and write numbers to 20 in numerals and words <br> - Numbers from 11 to 20 <br> - Tens and ones <br> - Count 1 more/ 1 less <br> - Compare groups of objects <br> - Compare numbers <br> - Order groups of objects <br> - Order numbers <br> Ready to Progress Criteria <br> 1NPV-1: Count within 100, forwards and backwards, starting with any number. <br> 1NPV-2: Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.10 Composition of numbers 11-19 (TP 1 and 2) |  |

## Year 1

Year 1 SPRING Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/12/Year-1-Full-Sping-Term.pdf

|  |  | Week 5 $\quad$ Week 6 $\quad$ Week 7 | Week 8 Week 9 | Week 10 Week 11 | Week 12 |
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| $\begin{aligned} & \text { in } \\ & \\ & \end{aligned}$ | Number: Addition and Subtraction (within 20) WRSS: 7 <br> - Add by counting on <br> - Find and make number bonds <br> - Add by making 10 <br> - Subtraction - not crossing 10 <br> - Subtraction - crossing 10 <br> - Related facts <br> - Compare number sentences <br> Ready to Progress Criteria <br> 1AS-2: Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.10 Composition of numbers 11-19 (TP 5) <br> 1.11 Addition and subtraction: bridging 10 (TP 5 and 6) | Number: Place Value (within 50) Including counting in 2 s and 5 s WRSS: 9 <br> - Numbers to 50 <br> - Tens and ones <br> - Represent numbers to 50 <br> - One more / one less <br> - Compare objects within 50 <br> - Compare numbers within 50 <br> - Counts in 2s <br> - Counts in 5 s <br> Ready to Progress Criteria <br> 1NPV-1: Count within 100, forwards and backwards, starting with any number. <br> 1NF-2: Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.9 Composition of numbers: 20-100 <br> Spine 2: Multiplication and Division <br> 2.1 Counting, unitising and coins | Measurement: Length and Height <br> WRSS: 2 <br> - Compare lengths and heights <br> - Measure length <br> Ready to Progress Criteria <br> 1NPV-2: Reason about the location of numbers to 20 within the linear number system, including comparing using < > and <br> 1AS-2: Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction 1.1 Comparison of quantities/ measures | Measurement: Weight and Volume <br> WRSS: 6 <br> - Introduce weight and mass <br> - Measure mass <br> - Compare mass <br> - Introduce capacity and <br> volume <br> - Measure capacity <br> - Compare capacity <br> Ready to Progress Criteria NA <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.1 Comparison of quantities/ measures | $\begin{aligned} & \text { z } \\ & \underline{b} \\ & \underline{y} \\ & 0 \\ & \mathbf{n} \\ & 0 \end{aligned}$ |

## Year 1

Year 1 SUMMER Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2021/03/Year-1-Full-Summer-Term.pdf

|  | Week 1 Week 2 Week 3 | Week 4 Week 5 | Week 6 | Week 7 Week 8 | Week 9 | Week 10 Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| む É ज゙ | Number: Multiplication and Division WRSS: 8 <br> - Count in $2 s(R)$ <br> - Count in $5 \mathrm{~s}(\mathrm{R})$ <br> - Count in 10 s <br> - Make equal groups <br> - Add equal groups <br> - Make arrays <br> - Make doubles <br> - Make equal groups - grouping <br> Ready to Progress Criteria <br> 1NF-2: Count forwards and backwards in multiples of 2,5 and 10 , up to 10 multiples, beginning <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction 1.8 Composition of numbers: multiples of 10 up to 100 (TP 2) <br> Spine 2: Multiplication and Division 2.1 Counting, unitising and coins (TP1-3) | Number: Fractions WRSS: 2 <br> - Find a half <br> - Find a quarter <br> Ready to Progress Criteria <br> NA <br> NCETM PD Materials Spine 3: Fractions 3.0 Guidance on the teaching of fractions in Key Stage 1 | Geometry: Position and Direction WRSS: 2 <br> - Describe turns <br> - Describe position <br> Ready to Progress Criteria <br> 1G-2: Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations <br> NCETM PD Materials NA | Number: Place Value (within 100) WRSS: 5 <br> - Counting forwards and backwards within 100 <br> - Partitioning numbers ㅁ <br> Comparing numbers <br> - Ordering numbers <br> - One more, one less <br> Ready to Progress Criteria <br> 1NPV-1: Count within 100, forwards and backwards, starting with any number <br> NCETM PD Materials NA | Measurement: Money WRSS: 3 <br> - Recognising coins <br> - Recognising notes <br> - Counting in coins <br> Ready to Progress Criteria <br> NA <br> NCETM PD Materials <br> Spine 2: Multiplication and Division <br> 2.1 Counting, unitising and coins <br> (TP 4-6) | Measurement: Time WRSS: 6 <br> $\square$ Before and after <br> - Dates <br> - Time to the hour <br> - Time to the half hour <br> - Writing time <br> - Comparing time <br> Ready to Progress Criteria <br> NA <br> NCETM PD Materials NA | 2 0 10 0 0 0 0 0 |

## Year 2

Year 2 AUTUMN Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-2-Full-Autumn-Term-.pdf

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|  | Number: Place Value WRSS: 10 <br> - Counting forwards and backwards within 20 (R) <br> - Tens and ones within $20(\mathrm{R})$ <br> - Counting forwards and backwards within 50 (R) <br> - Tens and ones within $50(\mathrm{R})$ <br> - Compare numbers within 50 (R) <br> - Count objects to 100 and read and write numbers in numerals and words <br> - Represent numbers to 100 <br> - Tens and ones with a part-whole model <br> - Tens and ones using addition <br> - Use a place value chart <br> - Compare objects <br> - Compare numbers <br> - Order objects and numbers <br> - Count in 2s (R) <br> - Count in 5s (R) <br> - Count in 10s (R) <br> - Count in 2 s <br> Ready to Progress Criteria <br> 2NPV-1: Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and non- standard partitioning 2NPV-2: Reason about the location of any two- digit number in the linear number system, including identifying the previous and next multiple of 10 <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.9 Composition of numbers: 20-100 (Revisit Y1 Place Value to 100) Spine 2: Multiplication and Division 2.1 Counting, unitising and coins (Count in 2s, 5s, 10s) | Number: Addition and Subtraction <br> WRSS: 16 <br> - Fact families - addition and subtraction bonds to 20 <br> - Check calculations <br> - Compare number sentences <br> - Related facts <br> - Bonds to 100 (tens) <br> - Add and subtract 1s <br> - 10 more and 10 less <br> - Add and subtract 10s <br> - Add by making 10 (R) <br> - Add a 2-digit and 1-digit number - crossing ten <br> - Subtraction - crossing 10 (R) <br> - Subtract a 1-digit number from a 2-digit number - crossing ten <br> - Add two 2-digit numbers - not crossing ten - add ones and add tens <br> - Add two 2-digit numbers - crossing ten - add ones and add tens <br> - Subtract a 2-digit number from a 2 -digit number - not crossing ten <br> - Subtract a 2-digit number from a 2 -digit number - crossing ten - subtract ones and tens <br> - Find and make number bonds (R) <br> - Bonds to 100 (tens and ones) <br> - Add three 1-digit numbers <br> Ready to Progress Criteria <br> 2NPV-2: Reason about the location of any two- digit number in the linear number system, including identifying the previous and next multiple of 10 <br> 2AS-1: Add and subtract across 10 <br> 2AS-3: Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a twodigit number. <br> 2AS-4: Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two- digit numbers <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.2 'Whole' and 'Parts': part-part-whole <br> 1.7 Addition and Subtraction: Strategies within 10 <br> 1.8 Composition of numbers: multiples of 10 up to 100 <br> 1.9 Composition of numbers: 20-100 (TP 6) <br> 1.11 Addition and subtraction: bridging 10 <br> $\underline{1.13}$ Addition and subtraction: two-digit and single-digit numbers <br> 1.14 Addition and subtraction: two-digit numbers and multiples of 10 <br> 1.16 Subtraction: two-digit and two-digit numbers <br> Spine 2: Multiplication and Division <br> 2.1 Counting, unitising and coins (TP 2) |  |  |  |  | Measurement: Money <br> WRSS: 10 <br> - Recognising coins and notes (R) <br> - Count money - pence <br> - Count money - pounds <br> (notes/coins) <br> - Count money - notes and coins <br> - Select money <br> - Make the same amount <br> - Compare money <br> - Find the total <br> - Find the difference <br> - Find change <br> - Two-step problems <br> Ready to Progress Criteria <br> 2NPV-2: Reason about the location of any two- digit number in the linear number system, including identifying the previous and next multiple of 10 <br> 2AS-1: Add and subtract across 10 <br> 2AS-2: Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?" <br> 2AS-3: Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two- digit number <br> 2AS-4: Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two- digit numbers <br> NCETM PD Materials <br> Spine 2: Multiplication and Division <br> 2.1 Counting, unitising and coins (TP 4-6) |  | Number: <br> Multiplication and Division <br> WRSS: 5 <br> - Make equal groups <br> (R) <br> - Add equal groups (R) <br> - Make arrays (R) <br> - Multiplication sentences using the $X$ symbol <br> - Multiplication sentences from pictures <br> Ready to Progress Criteria <br> 2MD-1: Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2 , 5 and 10 multiplication tables <br> NCETM PD Materials <br> Spine 2: <br> Multiplication and Division <br> 2.2 Structures: <br> multiplication representing equal groups (TP1) <br> 2.3 Times tables (2s) <br> 2.4 Times tables (5s/ <br> 10s) <br> 2.5 Doubling and halving |  |

## Year 2

Year 2 SPRING Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/12/Year-2-Full-Spring-Term.pdf


## Year 3

Year 3 AUTUMN Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-3-Full-Autumn-Term-.pdf

|  | Week 1 Week 2 $\quad$ Week 3 | Week 4 | Week | We | Week 7 | Week 8 |  | Week 1 | k 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value <br> WRSS: 10 <br> - Represent numbers to $100(\mathrm{R})$ <br> $\square$ Tens and ones using addition (R) <br> - Hundreds <br> - Represent numbers to 1,000 <br> - 100s, 10 s and 1 s <br> - Number line to 1,000 <br> - Find 1, 10, 100 more or less than a given number <br> - Compare objects to 1,000 <br> - Compare numbers to 1,000 <br> - Order numbers Count in 50 s <br> Ready to Progress Criteria <br> 3NPV-1: Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10 ; apply this to identify and work out how many 10 s there are in other threedigit multiples of 10 <br> 3NPV-2: Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning <br> 3NPV-3: Reason about the location of any three- digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 <br> 3NPV-4: Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with $2,4,5$ and 10 equal parts. <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.17 Composition and calculation: 100 and bridging 100 (TP 1) <br> 1.18 Composition and calculation: threedigit numbers (TP 2-4) | Number: Addition and Subtraction <br> WRSS: 20 <br> - Add and subtract multiples of 100 <br> - Add and subtract 1s (R) <br> - Add and subtract 3 -digit and 1-digit numbers - not crossing 10 <br> - Add a 2 -digit and 1-digit number - crossing 10 (R) <br> - Add 3-digit and 1-digit numbers - crossing 10 <br> - Subtract a 1-digit number from 2-digits - crossing 10 (R) <br> - Subtract a 1 -digit number from a 3 -digit number - crossing 10 <br> $\square$ Add and subtract 3-digit and 2-digit numbers - not crossing 100 <br> - Add 3 -digit and 2 -digit numbers - crossing 100 <br> - Subtract a 2-digit number from a 3-digit number - crossing 100 <br> - Add and subtract 100s <br> - Spot the pattern - making it explicit <br> - Add two 2-digit numbers - crossing 10 - add ones \& add tens (R) <br> - Subtract a 2-digit number from a 2-digit number - crossing $10(\mathrm{R})$ <br> - Add and subtract a 2-digit and 3-digit numbers - not crossing 10 or 100 <br> - Add a 2-digit and 3-digit numbers - crossing 10 or 100 <br> - Subtract a 2-digit number from a 3-digit number - crossing 10 or 100 <br> - Add two 3-digit numbers - not crossing 10 or 100 <br> - Add two 3-digit numbers - crossing 10 or 100 <br> - Subtract a 3-digit number from a 3-digit number - no exchange <br> - Subtract a 3-digit number from a 3-digit number - exchange <br> Ready to Progress Criteria <br> 3AS-2: Add and subtract up to three-digit numbers using columnar methods <br> 3AS-3: Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.17 Composition and calculation: 100 and bridging 100 (TP 3-4) <br> 1.18 Composition and calculation: three-digit numbers (TP 5) <br> 1.20 Algorithms: column addition <br> 1.21 Algorithms: column subtraction |  |  |  |  | Number: Multiplication and Division WRSS: 19 <br> - Multiplication - equal groups <br> - Multiplication using the symbol (R) <br> - Using arrays (R) <br> - 2 times-table (R) <br> - 5 times-table (R) <br> - Make equal groups - sharing (R) <br> - Make equal groups - grouping (R) <br> - Divide by 2 (R) <br> - Divide by 5 (R) <br> - Divide by 10 (R) <br> - Multiply by 3 <br> - Divide by 3 <br> - The 3 times table <br> - Multiply by 4 <br> - Divide by 4 <br> - The 4 times table <br> - Multiply by 8 <br> - Divide by 8 <br> - The 8 times table <br> Ready to Progress Criteria <br> 3MD-1: Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division <br> NCETM PD <br> Spine 2: Multiplication and Division 2.6 Structures and quotitive and partitive division <br> 2.7 Times tables: 2,4 and 8 , and the relationship between them (TP 2-4) 2.8 Times tables: 3, 6 and 9, and the relationship between them (TP 1) |  |  |  |

## Year 3

Year 3 SPRING Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-6-Full-Autumn-Term.pdf

|  | Week 1 $\quad$ Week 2 $\quad$ Week 3 | Week 4 | Week 5 ${ }^{\text {W }}$ Week 6 | Week 7 $\quad$ Week 8 $\quad$ Week 9 | Week $10 \times$ Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { v} \\ & \underset{\alpha}{\alpha} \\ & \stackrel{N}{n} \end{aligned}$ | Number: Place Value <br> WRSS: 7 <br> - Consolidation 2, 4 and 8 times tables (R) <br> - Comparing statements <br> - Related calculations <br> - Multiply 2-digits by 1-digit <br> - Divide 2-digits by 1-digit <br> - Scaling <br> - How many ways? <br> Ready to Progress Criteria <br> 3MD-1: Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division <br> NCETM PD <br> Spine 2: Multiplication and Division <br> 2.6 Structures and quotitive and partitive division (TP 4) <br> 2.8 Times tables: 3, 6 and 9, and the relationship between them (TP 5) <br> 2.13 Calculation: multiplying and dividing by 10 or 100 (TP 6) <br> 2.14 Multiplication: partitioning leading to short multiplication (TP 1-2) <br> 2.15 Division: partitioning leading to short division (TP 1) <br> 2.17 Structures: using measures and comparison to understand scaling (TP <br> 5) <br> 2.19 Calculation: $x / \div$ decimal fractions by whole numbers | Measurement WRSS: 7 <br> - Count money (pence) (R) <br> - Count money (pounds) (R) <br> - Pounds and pence <br> - Convert pounds and pence <br> - Add money <br> - Subtract money <br> - Give change <br> Ready to Progress Criteria <br> NPV-2: Recognise the place value of each digit in 3-digit numbers, and compose and decompose 3-digit numbers using standard and nonstandard partitioning <br> 3AS-2: Add and subtract up to three-digit numbers using columnar methods <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.25 Addition and subtraction: money Spine 2: <br> Multiplication and Division <br> 2.1 Counting, unitising and coins | Statistics <br> WRSS: 6 <br> - Make tally charts (R) <br> - Draw pictograms (2, 5 and 10) (R) <br> - Interpret pictograms (2, 5 and 10) (R) <br> - Pictograms <br> - Bar Charts <br> - Tables <br> Ready to Progress Criteria <br> NA <br> NCETM PD <br> NA | Measurement: Length and Perimeter WRSS: 9 <br> - Measure length <br> - Measure length (m) (R) <br> $\square$ Equivalent lengths ( m and cm ) <br> - Equivalent lengths ( mm and cm ) <br> - Compare lengths (R) <br> - Add lengths <br> - Subtract lengths <br> - Measure perimeter <br> - Calculate perimeter <br> Ready to Progress Criteria <br> 3NPV-2: Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and nonstandard partitioning <br> 3AS-2: Add and subtract up to threedigit numbers using columnar methods 3NPV-3: Reason about the location of any three- digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 <br> NCETM PD <br> Spine 2: Multiplication and Division <br> 2.16 Multiplication contexts: area and perimeter (1) (TP 1 to introduce) | Number: Fractions <br> WRSS: 11 <br> - Make equal parts (R) <br> - Recognise a half (R) <br> - Find a half (R) <br> - Recognise a quarter (R) <br> - Find a quarter (R) <br> - Recognise a third (R) <br> - Find a third (R) <br> - Unit factions (R) <br> - Non-unit fractions (R) <br> - Equivalence of $1 / 2$ and $2 / 4$ (R) <br> - Count in fractions (R) <br> *Y3 fraction content covered in the summer term so that time can be spent recapping/revising content from Y2 <br> Ready to Progress Criteria <br> 3NF-1: Secure fluency in addition and subtraction facts that bridge 10, through continued practice. <br> 3F-1: Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. <br> 3F-2: Find unit fractions of quantities using known division facts (multiplication tables fluency). <br> 3F-3: Reason about the location of any fraction within 1 in the linear number system <br> NCETM PD <br> Spine 3: Fractions <br> 3.1 Preparing for fractions: the part-whole relationship <br> 3.2 Unit fractions: identifying, representing and comparing <br> 3.6 Multiplying whole numbers and fractions (TP 3 Fractions of amounts) |  |

## Year 3

Year 3 SUMMER Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2021/03/Year-3-Full-Summer-Term.pdf

|  | Week 1 Week 2 $\quad$ Week 3 | Week 4 | Week 5 | Week 6 | Week 7 7 Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\sum_{\Omega}$ | 1 or several parts of a whole that is divided into equal parts <br> 3F-2: Find unit fractions of quantities using known division facts (multiplication tables fluency) <br> 3F-3: Reason about the location of any fraction within 1 in the linear number system <br> 3F-4: Add and subtract fractions with the same denominator, within 1 <br> NCETM PD <br> Spine 3: Fractions <br> 3.3 Non unit fractions: identifying, representing and comparing <br> 3.4 Adding and subtracting within one whole <br> 3.7 Finding equivalent fractions and simplifying fractions (TP 1-2) <br> NCETM PD <br> - Make 3D shapes <br> Ready to Progress Criteria <br> 3G-1: Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. <br> 3G-2: Draw polygons by joining marked points, and identify parallel and perpendicular sides <br> NCETM PD |  |  |  |  | $\quad$ Measur - Compare - Measure - Compare - Add and sub - Compare - Measure ca - Compare - Add and sub - Temperat NA Ready NA | nt: Mass and WRSS: 9 (R) <br> act mass me ( R ) ity city <br> act capacity R) <br> o Progress <br> NCETM PD | apacity |  |

## Year 4

Year 4 AUTUMN Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-4-Full-Autumn-Term-.pdf

|  | Week 1 $\quad$ Week 2 $\quad$ Week 3 $\quad$ Week 4 | Week 5 $\quad$ Week 6 $\quad$ Week 7 | Week 8 Week 9 | Week 10 Week 11 Week 12 |
| :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value <br> WRSS: 16 <br> - Represent numbers to 1,000 (R) <br> - 100s, 10s and 1s (R) <br> - Number line to 1,000 (R) <br> - Round to the nearest 10 <br> - Round to the nearest 100 <br> - Count in 1,000 s <br> - $1,000 \mathrm{~s}, 100 \mathrm{~s}, 10 \mathrm{~s}$ and 1 s <br> - Partitioning <br> - Number line to 10,000 <br> - Find 1, 10, 100 more or less (R) <br> - Compare numbers <br> - Order numbers <br> - Round to the nearest 1,000 <br> - Count in 25s <br> - Negative numbers <br> - Roman numerals to 100 <br> Ready to Progress Criteria <br> 4NPV-1: Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. <br> 4NPV-2: Recognise the place value of each digit in fourdigit numbers, and compose and decompose four-digit numbers using standard and non- standard partitioning. <br> 4NPV-3: Reason about the location of any four- digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.17 Composition and calculation: 100 and bridging 100 <br> 1.22 Composition and calculation: 1,000 and four-digit numbers <br> 1.27 Negative numbers: counting, comparing and calculating | Number: Addition and Subtraction WRSS: 14 <br> - Add and subtract 1s, 10s, 100s and 1,000s <br> - Add two 3-digit numbers - not crossing 10 or 100 (R) <br> - Add two 4-digit numbers - no exchange <br> - Add two 3-digit numbers - crossing 10 or 100 (R) <br> - Add two 4-digit numbers - one exchange <br> - Add two 4-digit numbers - more than one exchange <br> - Subtract a 3-digit number from a 3-digit number - no exchange (R) <br> - Subtract two 4-digit numbers - no exchange <br> - Subtract a 3-digit number from a 3-digit number - exchange (R) <br> - Subtract two 4-digit numbers - one exchange <br> - Subtract two 4-digit numbers - more than one exchange <br> - Efficient subtraction <br> - Estimate answers <br> - Checking strategies <br> Ready to Progress Criteria <br> NA <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.20 Algorithms: column addition <br> 1.21 Algorithms: column subtraction <br> 1.22 Composition and calculation: 1000 and four-digit numbers (TP 3) | Measurement: Length and Perimeter <br> WRSS: 9 <br> - Equivalent lengths - m and cm (R) <br> - Equivalent lengths - mm and cm (R) <br> - Kilometres <br> - Add lengths (R) <br> - Subtract lengths (R) <br> - Measure perimeter (R) <br> - Perimeter on a grid <br> - Perimeter of a rectangle <br> - Perimeter of rectilinear shapes <br> Ready to Progress Criteria 4G-1: Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant <br> NCETM PD Materials <br> Spine 2: Multiplication and Division <br> 2.16 Multiplication contexts: area and perimeter (1) | Number: Multiplication and Division WRSS: 14 <br> - Multiply by 10 <br> - Multiply by 100 <br> - Divide by 10 <br> - Divide by 100 <br> - Multiply by 1 and 0 <br> - Divide by 1 and itself <br> - Multiply and divide by 3 (R) <br> - The 3 times-table (R) <br> - Multiply and divide by 6 <br> - 6 times table and division facts <br> - Multiply and divide by 9 <br> - 9 times table and division facts <br> - Multiply and divide by 7 <br> - 7 times table and division facts <br> Ready to Progress Criteria <br> 4NF-1: Recall multiplication and division facts up to $12 \times 12$ and recognise products in multiplication tables as multiples of the corresponding number. <br> 4MD-1: Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. <br> 4MD-2: Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. <br> NCETM PD Materials <br> Spine 2: Multiplication and Division 2.6 Structures and quotitive and partitive division (TP 5) <br> 2.8 Times tables: 3, 6 and 9, and the relationship between them <br> 2.9 Times tables: 7 and patterns within/across times tables <br> 2.13 Calculation: multiplying and dividing by 10 or 100 |

## Year 4

Year 4 SPRING Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/12/Year-4-Full-Spring-Term.pdf

|  | Week 1 Week 2 Week 3 | Week 4 | Week 5 $\quad$ Week 6 $\quad$ Week 7 $\quad$ Week 8 | Week 9 $\quad$ Week 10 ${ }^{\text {a }}$ ( Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & v \\ & \frac{v}{\alpha} \\ & \stackrel{1}{n} \\ & \sim \end{aligned}$ | Number: Multiplication and Division <br> WRSS: 10 <br> - 11 and 12 times-table <br> - Multiply 3 numbers <br> - Factor pairs <br> - Efficient multiplication <br> - Written methods <br> - Multiply 2-digits by 1-digit (R) <br> - Multiply 2-digits by 1-digit <br> - Divide 2-digits by 1-digit (R) <br> - Divide 3-digits by 1-digit <br> - Correspondence problems <br> Ready to Progress Criteria <br> 4NF-1: Recall multiplication and division facts up to $12 \times 12$ and recognise products in multiplication tables as multiples of the corresponding number. <br> 4MD-2: Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication <br> 4MD-3: Understand and apply the distributive property of multiplication <br> NCETM PD Materials <br> Spine 2: Multiplication and Division <br> 2.10 Connective multiplication and division, and the distributive law <br> 2.11 Times tables: 11 and 12 <br> 2.14 Multiplication: partitioning leading to short multiplication <br> 2.15 Division: partitioning leading to short division | Measurement: Area <br> WRSS: 4 <br> - What is area? <br> - Counting squares <br> - Making shapes <br> - Comparing area <br> Ready to Progress Criteria <br> NA <br> NCETM PD <br> NA | ```Number: Fractions WRSS: 15 - Unit and non-unit fractions (R) - What is a fraction? - Tenths (R) - Count in tenths (R) - Equivalent fractions (R) - Fractions greater than 1 - Count in fractions - Add fractions (R) - Add 2 or more fractions \(\square\) Subtract fractions (R) - Subtract 2 fractions - Subtract from whole amounts - Fractions of a set of objects (R) - Calculate fractions of a quantity - Problem solving - calculate quantities \\ Ready to Progress Criteria \\ 4F-1: Reason about the location of mixed numbers in the linear number system \\ 4F-2: Convert mixed numbers to improper fractions and vice versa \\ 4F-3: Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers \\ NCETM PD \\ Spine 3: Fractions \\ 3.0 Guidance on the teaching of fractions in Key Stage 1 \\ 3.4 Adding and subtracting within one whole \\ (TP 1-2) \\ 3.5 Working across one whole: improper fractions and mixed numbers \\ 3.7 Finding equivalent fractions and simplifying fractions``` | Number: Decimals WRSS: 15 <br> - Recognise tenths and hundredths <br> - Tenths as decimals <br> - Tenths on a place value grid <br> - Tenths on a number line <br> - Divide 1-digit by 10 <br> - Divide 2-digits by 10 <br> - Hundredths <br> - Hundredths as decimals <br> - Hundredths on a place value grid <br> - Divide 1 or 2-digits by 100 <br> Ready to Progress Criteria <br> NA <br> NCETM PD <br> Spine 1: Addition and Subtraction 1.23 Compositing and calculation: tenths <br> 1.24 Composition and calculation: hundredths and thousandths *Mainly TP 1 and some of TP 2 <br> Spine 2: Multiplication and Division 2.13 Calculation: multiplying and dividing by 10 or 100 |  |

## Year 4

Year 4 SUMMER Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2021/03/Year-4-Full-Summer-Term.pdf

|  | Week 1 Week 2 | Week 3 Week 4 | Week 5 ${ }^{\text {a }}$ Week 6 | Week 7 | Week 8 Week 9 | Week 10 Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\sum_{\substack{\sim \\ \sim}}^{\sim}$ | Number: Decimals WRSS: 7 <br> - Bonds to 10 and 100 (R) <br> - Make a whole <br> - Write decimals <br> - Compare decimals <br> - Order decimals <br> - Round decimals <br> - Halves and quarters <br> Ready to Progress Criteria NA <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.24 Composition and calculation: hundredths and thousandths (TP 2 and 7) | Measurement: Money <br> WRSS: 8 <br> - Pounds and pence <br> - Ordering money <br> - Estimating money <br> - Convert pounds and pence (R) <br> - Add money (R) <br> - Subtract money (R) <br> - Find change (R) <br> - Four operations <br> Ready to Progress Criteria <br> NA <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.22 Composition and calculation: 1000 and four-digit numbers (TP <br> 4) <br> 1.25 Addition and subtraction: money | Measurement: Time WRSS: 8 <br> - Telling the time to 5 minutes ( R ) <br> $\square$ Telling the time to the minute ( R ) <br> - Using a.m. and p.m. (R) <br> - 24-hour clock (R) <br> - Hours, minutes and seconds <br> - Years, months, weeks and days <br> - Analogue to digital (12 hour) <br> - Analogue to digital (24 hour) <br> Ready to Progress Criteria NA <br> NCETM PD <br> NA | Statistics <br> WRSS: 15 <br> - Interpret charts <br> - Comparison, sum and difference <br> - Introducing line graphs <br> - Line graphs <br> Ready to Progress Criteria 4NPV-4: Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/ number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts <br> NCETM PD NA | Geometry: Properties of Shapes <br> WRSS: 11 <br> - Turns and angles (R) <br> - Right angles in shapes (R) <br> - Compare angles (R) <br> - Identify angles <br> - Compare and order angles <br> - Recognise and describe 2-D shapes (R) <br> - Triangles <br> - Quadrilaterals <br> - Horizontal and vertical (R) <br> - Lines of symmetry <br> - Complete a symmetric figure <br> Ready to Progress Criteria <br> 4G-2: Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. <br> 4G-3: Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry. <br> NCETM PD <br> NA | Geometry: Position and Direction WRSS: 4 <br> - Describe position <br> - Draw on a grid <br> - Move on a grid <br> - Describe movement on a grid <br> Ready to Progress Criteria <br> 4G-1: Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.27 Negative numbers: counting, comparing and calculating (TP 6) |  |

## Year 5

AUTUMN Term: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-5-Full-Autumn-Term-.pdf

|  | Week 1 $\quad$ Week 2 $\quad$ Week 3 | Week 4 ${ }^{\text {W }}$ Week 5 | Week 6 | Week 8 Week 9 Week 10 | Week 11 Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value WRSS: 14 <br> - 1000s, 100s, 10s and 1s (R) <br> - Numbers to 10,000 <br> - Rounding to the nearest $10(\mathrm{R})$ <br> - Rounding to the nearest 100 (R) <br> - Round to nearest 10, 100 and 1,000 <br> - Numbers to 100,000 <br> - Compare and order numbers to 100,000 <br> - Round numbers within 100,000 <br> - Numbers to a million <br> - Counting in 10s, 100s, 1,000s, 10,000s, and 100,000s <br> - Compare and order numbers to one million <br> - Round numbers to one million <br> - Negative numbers <br> - Roman Numerals to 1,000 <br> Ready to Progress Criteria <br> 5NPV-2: Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. 5 NPV-3: Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.26 Composition and calculation: Multiples of 1,000 up to $1,000,000$ <br> 1.27 Negative numbers: counting, comparing and calculating | Number: Addition and Subtraction WRSS: 8 <br> - Add two 4-digit numbers one exchange ( R ) <br> - Add two 4-digit numbers more than one exchange (R) <br> - Add whole numbers with more than 4 digits (column method) <br> - Subtract two 4-digit numbers - one exchange <br> (R) - Subtract two 4-digit numbers - more than one exchange (R) <br> - Subtract whole numbers with more than 4 digits (column method) <br> - Round to estimate and approximate Inverse operations (addition and subtraction) <br> - Multi-step addition and subtraction problems <br> Ready to Progress Criteria N/A <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.20 Algorithms: column addition | Statistics WRSS: 9 <br> - Interpret charts (R) <br> - Comparison, sum and difference (R) <br> - Introduce line graphs (R) <br> - Read and interpret line graphs <br> - Draw line graphs <br> - Use line graphs to solve problems <br> - Read and interpret tables <br> - Two-way tables <br> - Timetables <br> Ready to Progress Criteria <br> 5NPV-4: Divide 1 into 2, 4, <br> 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. <br> NCETM PD Materials <br> Spine 1: Addition and Subtraction <br> 1.28 Common structures and the part-part-whole relationship <br> 1.29 Using equivalence and the compensation property to calculate | Number: Multiplication and Division WRSS: 13 <br> - Multiples <br> - Factors <br> - Common factors <br> - Prime numbers <br> - Square numbers <br> - Cube numbers <br> - Multiply by 10 (R) <br> - Multiply by 100 (R) <br> - Multiply by 10, 100 and 1,000 <br> - Divide by 10 (R) <br> - Divide by 100 (R) <br> - Divide by 10, 100 and 1,000 <br> - Multiples of 10, 100 and 1,000 <br> Ready to Progress Criteria <br> 5MD-1: Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. 5MD-2: Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. <br> NCETM PD Materials <br> Spine 2: Multiplication and Division 2.9 Times tables: 7 and patterns within/across times tables (square numbers) <br> 2.13 Calculation: Multiplying and dividing by 10 or 100 <br> 2.18 Using equivalence to calculate <br> 2.19 Calculation: $\mathrm{x} / \div$ fractions by whole numbers <br> 2.20 Multiplication with three factors and volume (cube numbers) <br> 2.21 Factors, multiples, prime numbers and composite numbers | Measurement: Perimeter and Area WRSS: 9 <br> - Measure perimeter <br> - Perimeter on a grid (R) <br> - Perimeter of rectangles <br> (R) <br> - Perimeter of rectilinear shapes (R) <br> - Calculate perimeter <br> - Counting squares (R) <br> - Area of rectangles <br> - Area of compound shapes <br> - Area of irregular shapes <br> Ready to Progress Criteria <br> 5G-2: Compare areas and calculate the area of rectangles (including squares) using standard units. <br> NCETM PD Materials <br> 2.16 Multiplicative contexts: are and perimeter (1) *Revisit |

## Number: Multiplication and Division

 WRSS: 11- Multiply 2-digits by 1-digit (R)
- Multiply 3-digits by 1-digit (R)
- Multiply 4-digits by 1-digit
- Multiply 2-digits (area model)
- Multiply 2-digits by 2-digits - Multiply 3-digits by 2-digits - Multiply 4-digits by 2 -digits
- Divide 2-digits by 1-digit (R)
- Divide 3-digits by 1-digit (R)
- Divide 4-digits by 1-digit
- Divide with remainders


## Ready to Progress Criteria

5MD-3: Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.
5MD-4: Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.

## NCETM PD Materials

Spine 2: Multiplication and Division 2.14 Multiplication: partitioning leading to short multiplication 2.15 Division: partitioning leading to short division
2.23 Multiplication strategies for larger numbers and long multiplication

- What is a fraction? (R)
- Equivalent fractions (R)
- Fractions greater than $1(\mathrm{R})$
- Improper fractions to mixed numbers
- Mixed numbers to improper fractions
- Number sequences
- Compare and order fractions less than 1
- Compare and order fractions greater than 1
- Add and subtract fractions
- Add fractions within 1
- Add 3 or more fractions
- Add fractions
- Add mixed numbers
- Subtract fractions
$\square$ Subtract mixed numbers
- Subtract - breaking the whole
- Subtract 2 mixed numbers
- Multiply unit fractions by an integer
- Multiply non-unit fractions by an integer
- Multiply mixed numbers by integers
- Calculate fractions of a quantity
- Fraction of an amount (R)
- Using fractions as operators


## Ready to Progress Criteria

5F-2: Find equivalent fractions/ understand that they have the same value and the same position in the linear number system. $5 \mathrm{~F}-1$ : Find non-unit fractions of quantities.

## NCETM PD Materials

Spine 3: Fractions
3.1 Preparing for fractions: the part-whole relationship
3.2 Unit fractions: identifying, representing and comparing
3.3 Non unit fractions: identifying, representing and comparing
3.4 Adding and subtracting within one whole
*Revisit the above parts of earlier fractions to prepare for the topic.
3.5 Working across one whole: improper fractions/ mixed numbers
3.6 Multiplying whole numbers and fractions
3.7 Finding equivalent fractions and simplifying fractions
3.8 Common denomination: more adding and subtracting

Number: Decimals and Percentages

## WRSS: 9

- Decimals up to 2 dp
- Decimals as fractions
- Understand thousandths
- Thousandths as decimals
- Rounding decimals
- Order and compare decimals
- Understand percentages
- Percentages as fractions and decimals
- Equivalent fractions/decimals/ percentages


## Ready to Progress Criteria

5NPV-1: Know that 10 tenths are equivalent to 1 one, that 1 is 10 times the size of 0.1 . Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01 .

5NPV-2: Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.
5NPV-3: Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. 5F-3: Recall decimal fraction equivalents for half, quarter, fifth tenth and for multiples of these proper fractions.

## NCETM PD Materials

Spine 1: Addition and Subtraction
1.23 Compositing \& calculation: tenths
1.24 Composition \& calculation: hundredths and thousandths
Spine 3: Fractions
3.10 Linking fractions, decimals and percentages


## Year 6

AUTUMN Term: https:/ /wrm-13b48.kxcdn.com/wp-content/uploads/2020/08/Year-6-Full-Autumn-Term.pdf

|  | Week 1 | Week | Week 4 | Week | Week |  | Week 8 | W | Week 10 | k 11 | ee |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number: Addition, Subtraction, Multiplication and Division WRSS: 23 <br> - Add whole numbers with more than 4 digits (R) <br> - Subtract whole numbers with more than 4 digits ( $R$ ) <br> - Inverse operations (addition and subtraction) (R) <br> - Multi-step addition and subtraction problems (R) <br> - Add and subtract integers $\square$ Multiply 4-digits by 1-digit (R) $\square$ Multiply <br> 2-digits (area model) (R) <br> - Multiply 2-digits by 2-digits (R) <br> - Multiply 3-digits by 2-digits (R) <br> - Multiply up to a 4-digit number by 2-digit number <br> - Divide 4-digits by 1-digit (R) <br> - Divide with remainders (R) <br> - Short division <br> - Division using factors <br> - Long division <br> - Factors (R) <br> - Common factors <br> - Common multiples <br> - Primes to 100 <br> - Squares and cubes <br> - Order of operations <br> - Mental calculations and estimation <br> - Reason from known facts <br> Ready to Progress Criteria <br> 6AS/MD-2: Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding <br> NCETM PD <br> Spine 1: Addition and Subtraction <br> 1.20 Algorithms: column addition <br> 1.21 Algorithms: column subtraction <br> *Revisit for column methods <br> 1.30 Composition and calculation: numbers up to $10,000,000$ <br> Spine 2: Multiplication and Division <br> 2.9 Times tables: 7 and patterns within/across times tables (square numbers) <br> 2.15 Division: partitioning leading to short division (if necessary) <br> 2.20 Multiplication with three factors/ volume (cube numbers) <br> $\underline{2.21}$ Factors, multiples, prime numbers and composite numbers <br> 2.22 Combining multiplication with addition and subtraction <br> $\underline{2.23}$ Multiplication strategies for larger numbers/ long multiplication <br> 2.24 Division: dividing by two-digit divisors <br> 2.25 Using compensation to calculate <br> 2.28 Combining division with addition and subtraction |  |  |  |  | Number: Fractions <br> WRSS: 19 <br> - Equivalent fractions (R) <br> - Simplify fractions <br> - Improper fractions to mixed numbers (R) <br> - Mixed numbers to improper fractions (R) <br> - Fractions on a number line <br> - Compare and order (denominator) <br> - Compare and order (numerator) <br> - Add and subtract fractions <br> - Add mixed numbers (R) <br> - Add fractions <br> - Subtract mixed numbers (R) <br> - Subtract fractions <br> - Mixed addition and subtraction <br> - Multiply fractions by integers <br> - Multiply fractions by fractions <br> - Divide fractions by integers <br> - Four rules with fractions <br> - Fraction of an amount <br> - Fraction of an amount - find the whole <br> Ready to Progress Criteria <br> 6F-1: Recognise when fractions can be simplified, and use common factors to simplify fractions. <br> 6F-2: Express fractions in a common denomination and use this to compare fractions that are similar in value. <br> 6F-3: Compare fractions with different denominators, including fractions greater than 1 , using reasoning, and choose between reasoning and common denomination as a comparison strategy. <br> NCETM PD Materials <br> Spine 3: Fractions <br> 3.5 Working across one whole: improper fractions and mixed numbers <br> 3.7 Finding equivalent fractions and simplifying fractions <br> 3.8 Common denomination: more adding and subtracting (TP 5) <br> 3.9 Multiplying fractions and dividing fractions by a whole number (TP 1 and 3) |  |  |  | Geometry: Position and Direction WRSS: 4 <br> - The first quadrant <br> - Four <br> quadrants <br> - Translations <br> - Reflections <br> Ready to <br> Progress <br> Criteria <br> NA <br> NCETM PD <br> Materials <br> Spine 1: <br> Addition and Subtraction <br> 1.27 Negative numbers: <br> counting, comparing and calculating (TP 6) |




Year 6 SUMMER Term:
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Week $1 \quad$ Week 2 $\quad$ Week

Week 4 Week 5 $\quad$ Week 6 $\quad$ Week 7
Geometry: Properties of Shape WRSS: 14

- Measure with a protractor
- Draw lines and angles accurately (R)
- Introduce angles
- Angles on a straight line (R)
- Angles around a point (R)
- Calculate angles
- Vertically opposite angles
- Angles in a triangle
- Angles in a triangle - special cases
- Angles in a triangle - missing angles

띂 ロ Angles in special quadrilaterals

- Angles in regular polygons


## Consolidation/SATS Preparation and

 Revision