Year 4, Autumn Term 1

Wk Strands

- MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra
- NPV Number and place value; MAS Mental addition and subtraction

3 MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division; FRP Fractions, ratio and proportion

Multiplication and division

Week 3 focuses on learning and using multiplication and division facts in solving more advanced problems.

MEA Measurement; **DPE** Decimals, percentages and their equivalence to fractions

Time: length

Week 4 focuses on telling the time, calculating

Progression Focus

Addition and subtraction

Weeks 1 and 2 focus on mental strategies in addition and subtraction, including the use of a robust understanding of place value.

Addition and subtraction

Weeks 1 and 2 focus on mental strategies in addition and subtraction, including the use of a robust understanding of place value.

Weekly Summary

Finding pairs with a total of 100; adding to the next multiple of 100 and subtracting to the previous multiple of 100; subtract by counting up to find a difference; adding several numbers

Read, write 4-digit numbers and know what each digit represents; compare 4-digit numbers using < and > and place on a number line; add 2-digit numbers mentally; subtract 2-digit and 3-digit numbers

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

- Recognise the place value of each digit in a 4-digit number (1s, 10s, 100s, 1000s); order and compare numbers with up to 4 digits
- Place 4-digit numbers on number lines, recognise the place value of each digit and round these to the nearest 10, 100 or 1000

Please see Mastery Checkpoint 4.2.1 (Teacher Guide 4.2.1)

Learn \times and \div facts for the 6 and 9 times-table and identify patterns; multiply multiples of 10 by single-digit numbers; multiply 2-digit numbers by single-digit numbers (the grid method); find fractions of amounts

Mastery Checkpoints

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Use table facts and commutativity to perform multiplications involving multiples of 10
- Recall multiplication and division facts for multiplication tables, for 2, 5, 10, 3, 4, 8, 6and 9 times tables

Please see Mastery Checkpoint 4.3.2 (Teacher Guide 4.3.2)

Find unit fractions of amounts

Please see Mastery Checkpoint 4.3.3 (Teacher Guide 4.3.3)

Tell and write the time to the minute on analogue and digital clocks; calculate time intervals; measure in metres, centimetres



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time intervals and using m, cm and mm in the measurement of lengths.

and millimetres; convert lengths between units; record using decimal notation

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

- Read, write and convert times between analogue and 12 hour digital clocks
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

Please see Mastery Checkpoint 4.4.4 (Teacher Guide 4.4.4)

WAS Written addition and subtraction

Addition and subtraction

Week 5 focuses on understanding and using formal written methods of addition and subtraction.

Add two 3-digit numbers using column addition; subtract a 3-digit number from a 3-digit number using an expanded column method (decomposing only in one column)

Year 4, Autumn Term 2

Wk Strands

5

7

6 MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; FRP Fractions, ratio and proportion

DPE Decimals, percentages and their equivalence to

fractions; NPV Number and place value; WAS

Written addition and subtraction; MAS Mental

Progression Focus

Fractions and decimals; addition

Weeks 6 and 7 focus on fractions and decimals, and end by using place value in formal addition.

Fractions and decimals; addition

Weeks 6 and 7 focus on fractions and decimals, and end by using place value in formal addition.

Weekly Summary

Double 3-digit numbers and halve even 3-digit numbers; revise unit fractions; identify equivalent fractions; reduce a fraction to its simplest form; count in fractions (each fraction in its simplest form)

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcome from the Progression Map:

Double and halve 3-digit numbers using partitioning and be able to describe, explain and predict patterns

Please see Mastery Checkpoint 4.6.5 (Teacher Guide 4.6.5)

Look at place value in decimals and the relationship between tenths and decimals; add two 4-digit numbers; practise written and mental addition methods; use vertical addition to investigate patterns

Mastery Checkpoints

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

Use column addition to add 3-digit numbers; begin to add 4digit numbers

Please see Mastery Checkpoint 4.7.6 (Teacher Guide 4.7.6)

Recognise and write decimal and fraction equivalents of



addition and subtraction

8 DPE Decimals, percentages and their equivalence to fractions; MEA Measurement; STA Statistics; PRA Problem solving, reasoning and algebra

Measures; data

Week 8 focuses on using SI units in measuring, reading scales and collecting, interpreting and recording data.

9 NPV Number and place value; WAS Written addition and subtraction; MAS Mental addition and subtraction

Subtraction

Week 9 focuses on using place value to underpin an understanding of different methods in subtraction and to choose between these.

MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra

Multiplication and division

Week 10 focuses on developing a knowledge and understanding of multiplication and division to enable children to tackle harder problems.

tenths and a half

 Find the effect of dividing a 1-digit or 2-digit number by 10 and recognise that the first place after a decimal point is a tenth

Please see Mastery Checkpoint 4.7.7 (Teacher Guide 4.7.7)

Convert multiples of 100 g into kilograms; convert multiples of 100 ml into litres; read scales to the nearest 100 ml; estimate capacities; draw bar charts, record and interpret information

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

 Solve simple measures problems and convert between different units of measure – mm, cm, m; ml, l; g, kg

Please see Mastery Checkpoint 4.8.8 (Teacher Guide 4.8.8)

Round 4-digit numbers to the nearest: 10, 100 and 1000; subtract 3-digit numbers using the expanded written version and the counting up mental strategy and decide which to use

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

- Know bonds to the next 100
- Use counting up to subtract numbers with up to 3 digits crossing one multiple of 100

Please see Mastery Checkpoint 4.9.9 (Teacher Guide 4.9.9)

Use the grid method to multiply 3-digit by single-digit numbers and introduce the vertical algorithm; begin to estimate products; divide numbers (up to 2 digits) by single-digit numbers with no remainder, then with a remainder

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

 Use the distributive law to multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout (grid)

Please see Mastery Checkpoint 4.10.10 (Teacher Guide 4.10.10)

Year 4, Spring Term 1

Wk Strands

Progression Focus

Weekly Summary



11 **NPV** Number and place value; **PRA**Problem solving, reasoning and algebra

Place value: addition and subtraction

Week 11 focuses on ensuring a robust understanding of place value and numbers to 10,000, including counting in equal steps; this understanding is then used to underpin mental addition and subtraction.

WAS Written addition and subtraction; MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MEA Measurement

Subtraction: multiplication

Week 12 focuses on written calculation methods underpinned by a secure understanding of place value: vertical subtraction and multiplication methods, and multiplication problems involving money.

13 MMD Mental multiplication and division; FRP Fractions, ratio and proportion; PRA Problem solving, reasoning and algebra

Division; fractions

Week 13 focuses on mental multiplication and division strategies, which underpin the work on proper fractions that follows, including finding non-unit fractions of amounts, equivalent fractions and simplifying.

14 GPS Geometry: properties of shapes; PRA Problem solving, reasoning and algebra

2D shapes

Week 14 focuses on properties of 2D shapes, including angles, parallel and perpendicular lines, and symmetry.

Place 4-digit numbers on landmarked lines; 0–10 000 and 1000–2000; round 4-digit numbers to the nearest 10, 100 and 1000; mentally add and subtract to/from 4-digit and 3-digit numbers using place-value; count on and back in multiples of 10, 100 and 1000; count on in multiples of 25 and 50; add and subtract multiples of 10 and 100 to/from 4-digit numbers

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

Place 4-digit numbers on number lines, recognise the place value of each digit and round these to the nearest 10, 100 or 1000

Please see Mastery Checkpoint 4.11.11 (Teacher Guide 4.11.11)

- Count on and back in multiples of 6, 7, 9, 25 and 1000 and work systematically, predicting and explaining patterns
- Add and subtract 1s, 10s or 100s from numbers with up to 4 digits crossing multiples of 10, 100, or 1000

Please see Mastery Checkpoint 4.11.12 (Teacher Guide 4.11.12)

Use expanded written subtraction and compact written subtraction to subtract pairs of 3-digit numbers (one 'exchange'); use expanded column subtraction and compact column subtraction to subtract pairs of 3-digit and 2-digit numbers from 3-digit numbers (one 'carry'); learn the 7× table and 'tricky' facts; use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; solve simple money problems with decimals to two decimal places

Use mental multiplication and division strategies; find non-unit fractions of 2digit and 3-digit numbers; find equivalent fractions and use them to simplify fractions (halves, thirds, quarters)

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

 Solve simple problems involving fractions and find non-unit fractions of amounts where the answer is a whole number

Please see Mastery Checkpoint 4.13.13 (Teacher Guide 4.13.13)

 Recognise and show families of common equivalent fractions and begin to compare fractions with non-like denominators

Please see Mastery Checkpoint 4.13.14 (Teacher Guide 4.13.14)

Recognise and compare acute, right and obtuse angles; draw lines of a given length; identify perpendicular and parallel lines; recognise and draw line symmetry in shapes; sort 2D shapes according to their properties; draw shapes with given properties and explain reasoning; draw the other half of symmetrical shapes



MMD Mental multiplication and division; WMD Written multiplication and division; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra

Mental calculation strategies

Week 15 focuses on the relationship between the operations, particularly multiplication and division, and then between addition and subtraction; these important inverse relationships are linked to mental calculation.

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

 Identify acute and obtuse angles and compare and order angles up to 2 right angles by size

Please see Mastery Checkpoint 4.14.15 (Teacher Guide 4.14.15)

- Draw shapes with given properties and explain reasoning
- Identify lines of symmetry in 2D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry

Please see Mastery Checkpoint 4.14.16 (Teacher Guide 4.14.16)

Understand how to divide 2-digit and 3-digit numbers by 1-digit numbers using place value and mental strategies; divide numbers by 1-digit numbers to give answers between 10 and 25, with remainders; identify factor pairs and use these to solve multiplications and divisions with larger numbers; use Frog to find complements to multiples of 1000; use Frog to find change from £10, £20 and £50

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Recall multiplication and division facts for multiplication tables, for 2, 3, 4, 5, 6, 7, 8, 9 and 10 times tables
- Recognise and use factor pairs and commutativity in mental calculations, to solve multiplications and divisions involving 2-digit and 3-digit multiples of 10
- Use doubling and halving to multiply and divide by 4
- Use place value and known and derived facts to divide numbers above table facts

Please see Mastery Checkpoint 4.15.17 (Teacher Guide 4.15.17)

- Recognise and use factor pairs and commutativity in mental calculations, to solve multiplications and divisions involving 2-digit and 3-digit multiples of 10
- Recall multiplication and division facts for multiplication tables, for 2, 3, 4, 5, 6, 7, 8, 9 and 10 times tables

Please see Mastery Checkpoint 4.15.18 (Teacher Guide 4.15.18)

Year 4, Spring Term 2

Wk Strands

- DPE Decimals, percentages and their equivalence to fractions; NPV Number and place value; PRA Problem solving, reasoning and algebra; WAS Written addition and subtraction
- MAS Mental addition and subtraction; WAS Written addition and subtraction; MEA Measurement; PRA Problem solving, reasoning and algebra

MEA Measurement; **PRA** Problem solving, reasoning and algebra

18

Time; length

Week 18 focuses on time-telling and the 24-hour clock, including calculating time intervals; the week ends with some practice in finding missing lengths in rectilinear shapes.

Progression Focus

Place value

Week 16 focuses on ensuring a robust understanding of that place value in decimal numbers.

Addition and subtraction

Week 17 focuses on using understanding of place value to choose appropriate strategies when calculating with decimals or money; written methods then include larger whole numbers.

Weekly Summary

Recognise, use, compare and order decimal numbers; understand place value in decimal numbers; recognise that decimals are tenths; round decimals numbers to the nearest whole number; divide 2-digit numbers by 10 to get decimal numbers; multiply decimal numbers by 10 to get 2-digit numbers; divide 3-digit multiples of ten by 100 to get decimal numbers; multiply decimal numbers by 100 to get 3-digit multiples of ten; add four digit numbers using written method with answers greater than 10 000

Add amounts of money using written methods and mentally using place value and number facts; choose to add using the appropriate strategy: mental or written; subtract, choosing appropriate mental strategies: counting up or taking away (using counting back, place value or number facts); solve subtractions using a suitable written method (column subtraction)

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Add 2 numbers with up to 4 digits using the formal written method of columnar addition, including answers that are greater than 10 000
- Use column addition to add several 2-digit numbers

Please see Mastery Checkpoint 4.17.19 (Teacher Guide 4.17.19)

- Use counting up subtraction to subtract 3-digit numbers and 4-digit numbers from multiples of 1000 and describe and explain patterns in digit sums
- Use compact column subtraction to subtract 3-digit numbers

Please see Mastery Checkpoint 4.17.20 (Teacher Guide 4.17.20)

Tell the time on a 24 hour clock, using am and pm correctly; convert pm times to 24 hour clock and vice versa; use 24 hour clock in calculating intervals of time; measure and calculate perimeters of rectilinear shapes where each side is labelled in cm and m; find missing lengths in rectilinear composite shapes; find the perimeters of rectilinear shapes with some lengths not marked; convert from one unit of length to another; solve word problems involving lengths including those involving perimeters

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

Read, write and convert time between analogue and digital 12- and 24hour clocks

Please see Mastery Checkpoint 4.18.21 (Teacher Guide 4.18.21)

- 19 NPV Number and place value; WAS
 Written addition and subtraction; MAS
 Mental addition and subtraction
- 20 WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction; WAS Written addition and subtraction

Subtraction

Week 19 focuses on using understanding of place value to solve subtraction problems using appropriate methods.

Multiplication and division

Week 20 focuses on developing a good understanding of the processes involved in more complex written algorithms for multiplication and division.

Understand place value in 4-digit numbers; partition 4-digit numbers; solve subtraction of 4-digit numbers using column subtraction (decomposition); choose an appropriate method to solve subtractions, either mental or written, and either column or counting up (Frog)

Use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; explore patterns; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1-digit numbers to give answers between 10 and 35, without remainders; solve word problems

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

- Identify the calculation(s) needed to solve a word problem
- Solve addition and subtraction 2-step problems in context
- Add amounts of money mentally using place value and number facts
- Estimate, compare and calculate different measures, including solving simple money problems involving decimals to 2 decimal places

Please see Mastery Checkpoint 4.20.22 (Teacher Guide 4.20.22)

Year 4, Summer Term 1

Wk Strands

22

21 **NPV** Number and place value; **PRA**Problem solving, reasoning and algebra

Progression Focus

Place value and decimals

Weeks 21 and 22 focus on consolidating place value in 4- and 5-digit numbers, extending to decimals; including multiplying and dividing by 10 and 100, placing numbers (including negative) on lines, and adding and subtracting powers of 10.

MAS Mental addition and subtraction; DPE Decimals, percentages and their equivalence to fractions

Place value and decimals

Weeks 21 and 22 focus on consolidating place value in 4- and 5-digit numbers, extending to decimals; including multiplying and dividing by 10 and 100, placing numbers (including negative) on lines, and adding and subtracting powers of 10.

Weekly Summary

Read, write and compare 4-digit numbers and place on a line; find 1000 more or less than any given number; read, write and compare 5-digit numbers; recognise what each digit represents in a 5-digit number; read, use and compare negative numbers in the context of temperature

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

 Count backwards through zero to include negative numbers; use knowledge of factors and reasoning to solve problems.

Please see Mastery Checkpoint 4.21.23 (Teacher Guide 4.21.23)

Multiply and divide numbers by 10 and 100 including decimals (tenths and hundredths); read and write decimals (to 1 and 2 places), understanding that these represent parts (tenths and hundredths) of numbers; mark 1- and 2- place decimals on a line; count in tenths (0.1s) and hundredths (0.01s); multiply numbers with up to 2 decimal places by 10 and 100, and divide numbers by 10 and 100; say the number one tenth and one hundredth more or less than a given number; round decimal numbers to



23 MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; NPV Number and place value; WMD Written multiplication and division: MEA Measurement

Multiplication and division

Week 23 focuses on extending knowledge of times tables, using this to develop understanding of harder written multiplication algorithms; and on division as the inverse of multiplication.

24 NPV Number and place value; MEA Measurement; GPS Geometry: properties of shapes

Area and perimeter; 2D and 3D shapes

Week 24 focuses on calculating perimeters and areas of shapes, and on properties of 2D and 3D shapes.

the nearest whole number

Learn 11 and 12x tables; develop and use effective mental multiplication strategies; use a vertical written method to multiply 3-digit numbers by 1-digit numbers; use rounding to estimate answers; use a written method to multiply 3-digit numbers, including amounts of money by 1-digit numbers; multiply 2-digit and 3-digit numbers by 1-digit numbers; understand how division 'undoes' multiplication and vice versa; divide above the tables facts using multiples of 10

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Use place value and known and derived facts to multiply 2-digit and 3-digit numbers by a 1-digit number (including multiplying by 0 and 1) and to multiply three 1-digit numbers
- Use place value and known and derived facts to divide larger numbers (answers up to 50) including dividing by 1
- Recall multiplication and division facts for multiplication tables up to 12 x 12 and describe patterns in the tables
- Use doubling and halving to multiply and divide mentally
- Estimate and use inverse operations to check answer to a multiplication or division calculation

Please see Mastery Checkpoint 4.23.24 (Teacher Guide 4.23.24)

- Multiply 2- and 3-digit numbers by a 1-digit number using formal written layout where appropriate
- Use a written method to multiply amounts of money by 1-digit numbers

Please see Mastery Checkpoint 4.23.25 (Teacher Guide 4.23.25)

Recognise and read Roman numerals to 100; begin to know the history of our number system including 0; calculate area and perimeter of rectilinear shapes using multiplication and addition, or counting; recognise, name and classify 2D shapes identifying regular and irregular polygons; sort 2D shapes according to properties including types of quadrilaterals and triangles; revise 3D shapes, consider 2D-shaped sides on 3D shapes, and sort shapes

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- Find the area of rectilinear shapes



25 DPE Decimals, percentages and their equivalence to fractions; PRA Problem solving, reasoning and algebra; FRP Fractions, ratio and proportion

Fractions and decimals

Week 25 focuses on developing and enhancing the concept of decimal number, including relating decimal fractions to proper fractions and recognising equivalents.

Please see Mastery Checkpoint 4.24.26 (Teacher Guide 4.24.26)

 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

Please see Mastery Checkpoint 4.24.27 (Teacher Guide 4.24.27)

Understand, read and write 2-place decimals; compare 2-place decimals in the context of lengths; add and subtract 0·1 and 0·01 and say a number one-tenth (0·1) or one-hundredth (0·01) more or less than a given number; revise equivalent fractions; write fractions with different denominators with a total of 1; recognise decimal and fraction equivalents

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- · Count up and down in tenths and hundredths
- Add and subtract 0.1 and 0.01
- Solve simple measure and money problems using fractions and decimals to 2 decimal places
- Convert between different metric units of measure, e.g. km to m; solve problems involving different measures

Please see Mastery Checkpoint 4.25.28 (Teacher Guide 4.25.28)

 Use equivalent fractions to simplify and compare fractions with nonlike denominators

Please see Mastery Checkpoint 4.25.29 (Teacher Guide 4.25.29)

Year 4, Summer Term 2

Wk Strands

26 MAS Mental addition and subtraction; MMD
Mental multiplication and division; WMD
Written multiplication and division; PRA
Problem solving, reasoning and algebra

Progression Focus

Addition and subtraction; multiplication and division

Week 26 focuses on adding and subtracting 2-, 3- and 4- digit numbers; and on using knowledge of factors, products and doubling to solve multiplication problems mentally.

Weekly Summary

Add two 2-digit numbers or a 2-digit number to a 3- or 4-digit number mentally; subtract 2-, 3- and 4-digit numbers using counting up; derive factors of 2-digit numbers and use factors and doubling to solve multiplication mentally; solve integer scaling problems using mental strategies and spot a relationship between products; solve correspondence problems, using a systematic approach and calculate using mental multiplication strategies

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Confidently add numbers with up to 4 digits using place value and number facts, including fluency in adding any pairs of 2-digit numbers
- Add numbers with up to 4 digits using the formal written method of

27 WAS Written addition and subtraction; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction

Addition and subtraction

Week 27 focuses on addition and subtraction using written column methods.

28 GPD Geometry: position and direction; STA Statistics

Coordinate geometry; statistics and data

Week 28 focuses on using coordinate grids; and developing that understanding to draw line graphs and know that intermediate points have meaning.

columnar addition

Use inverse operations to check answers to a calculation

Please see Mastery Checkpoint 4.26.30 (Teacher Guide 4.26.30)

 Solve problems involving multiplying and adding, including integer scaling and correspondence

Please see Mastery Checkpoint 4.26.31 (Teacher Guide 4.26.31)

Solve written addition of two 4-digit numbers; add amounts of money (pounds and pence) using column addition; solve 4-digit minus 4-digit and 4-digit minute 3-digit subtractions using written column method (decomposition) and check subtraction with addition; solve word problems choosing an appropriate method

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

- When appropriate, use counting up to subtract numbers with up to 4 digits
- Use counting up and subtraction to find change or solve money problems
- Subtract numbers with up to 4 digits using the formal written method of expanded or compact columnar subtraction
- Use inverse operations to check answers to a calculation

Please see Mastery Checkpoint 4.27.32 (Teacher Guide 4.27.32)

Use coordinates to draw polygons; find the coordinates of shapes after translation; draw and interpret bar charts and pictograms; draw line graphs and understand that intermediate points have meaning

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Describe positions on a 2D grid as coordinates in the first quadrant
- Describe movements between positions as translations of a unit left/right and up/down
- Plot specified points and draw sides to complete a given polygon

Please see Mastery Checkpoint 4.28.33 (Teacher Guide 4.28.33)

- 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

Please see Mastery Checkpoint 4.28.34 (Teacher Guide 4.28.34 Additional



29 WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MMD Mental multiplication and division; FRP Fractions, ratio and proportion; DPE Decimals, percentages and their equivalence to fractions

Multiplication and division; fractions

Weeks 29 and 30 focus on enhancing mental and written strategies for multiplication and division; and link this to unit and non-unit fractions and the decimal results of dividing by 10 and 100.

30 MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division; FRP Fractions, ratio and proportion

Multiplication and division; fractions

Weeks 29 and 30 focus on enhancing mental and written strategies for multiplication and division; and link this to unit and non-unit fractions and the decimal results of dividing by 10 and 100.

Resource 4.28.34)

Use the vertical algorithm (ladder) to multiply 3-digit numbers by 1-digit numbers; find non-unit fraction of amounts, using 'chunking'; add fractions with like denominators, including totals greater than 1; divide by 10 and 100 (to give answers with 1 and 2 decimal places)

Mastery Checkpoint

There are two Mastery Checkpoints in this week. They test the following outcomes from the Progression Map:

- Write additions of fractions with different denominators with a total of 1
- Add and subtract fractions with the same denominator, including totals greater than 1

Please see Mastery Checkpoint 4.29.35 (Teacher Guide 4.29.35)

- Recognise that tenths and hundredths arise when dividing by 10 and 100; multiply decimal numbers by 10 and 100, understanding that this involves a shift of the digits on a place-value grid
- Compare numbers with up to 2 decimal places, identify the value of the digits as ones, tenths and hundredths, and round decimal numbers to the nearest whole
- Recognise and write decimal and fraction equivalents of tenths, hundredths, 1/4, 1/2 and 3/4

Please see Mastery Checkpoint 4.29.36 (Teacher Guide 4.29.36)

Multiply 2-digit numbers by 11 and 12; look for patterns and write rules; multiply 2-digit numbers by numbers between 10 and 20 using the grid method; begin to use the grid method to multiply pairs of 2-digit numbers; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1-digit numbers to give answers between 20 and 50, with and without remainders; find non-unit fractions of amounts

Mastery Checkpoint

There is one Mastery Checkpoint in this week. It tests the following outcomes from the Progression Map:

 Find non-unit fractions of amounts and solve problems involving harder fractions to calculate quantities

Please see Mastery Checkpoint 4.30.37 (Teacher Guide 4.30.37)