

# Shebbear Community School

## Mathematics - Mixed-age Yearly Overview for Years 5 and 6 (Koala Class)

Autumn Term 1			
Wk	Yr	Strands	Weekly Summary
1	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS)	Explore place value in 5-digit numbers (PV additions/subtractions); add and subtract 1s, 10s, 100s, 1000s and 10 000s; place 5-digit numbers on a line and compare pairs of numbers, use < and >; revise using column addition to add pairs of 4-digit numbers; begin to use column addition to add pairs of 5-digit numbers
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS)	Explore place value in 6-digit numbers (PV additions/subtractions); add and subtract 1s, 10s, 100s, 1000s, 10 000s and 100 000s; place 6-digit numbers on a line and compare pairs of numbers, use < and >; revise using column addition to add pairs of 5-digit numbers with 5-digit answers; use column addition to add pairs of 5-digit numbers with 6-digit answers
2	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Divide by 10 and 100 to give answers with two decimal places and understand place value; multiply and divide by 10 and 100; place two place decimal numbers on a number line and compare two numbers; add amounts of money using column addition and use rounding to check answers
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Understand place value in numbers with three decimal places; multiply and divide by 10, 100 and 1000; place three place decimals on lines, round to the nearest 0.01, 0.1 or 1 and compare two numbers; add two or three amounts of money using column addition; add two or three numbers with two decimal places in a measures context (e.g. metres); use rounding to check answers
3	5	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA)	Use Frog to find change from £20, £50 and £100 and to subtract amounts of money; use column subtraction (decomposition) to subtract pairs of four-digit numbers and to subtract 3-digit numbers from 4-digit numbers; choose whether to use counting up (Frog) or column subtraction (decomposition) to work out given calculations (4 digits)
	6	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Add several prices then use Frog to find change from £20, £50 and £100 and to subtract amounts of money; revise using column subtraction (decomposition) to subtract pairs of five-digit numbers; use column subtraction (decomposition) to subtract 3-digit numbers and 4-digit numbers from 5-digit numbers; choose whether to use counting up (Frog) or column subtraction (decomposition) to work out given calculations (5 digits)
4	5	Mental multiplication and division (MMD); Geometry: properties of shapes (GPS)	Classify quadrilaterals; describe properties of 2D shapes including polygons; explore multiples and divisibility; find factors of 2-digit numbers
	6	Mental multiplication and division (MMD); Geometry: properties of shapes (GPS)	Classify and sort quadrilaterals; name parts of circles (radius, diameter and circumference) and know diameter is twice radius; revise angles round a point on a line and find missing angles; know the totals of angles in triangles and quadrilaterals and find missing angles; find that opposite angles are equal and find angles in polygons.
5	5	Number and place value (NPV);	Find common multiples; find prime numbers less than

		Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA)	50; find equivalent fractions and simplify fractions using multiples and factors; compare fractions with related denominators; find unit and non-unit fractions of amounts
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA)	Find common multiples and factors; find numbers that have a pair of prime factors; find equivalent fractions and simplify fractions using multiples and factors; compare and order fractions with unrelated denominators; find unit and non-unit fractions of amounts.

<b>Autumn Term 2</b>			
<b>Wk</b>	<b>Yr</b>	<b>Strands</b>	<b>Weekly Summary</b>
6	5	Number and place value (NPV); Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Measurement (MEA)	Place 4- and 5-digit numbers on a line, rounding to the nearest 10, 100, 1000 or 10 000; revise using the grid method to multiply 3-digit numbers by 1-digit numbers; use short multiplication to multiply 3-digit numbers by 1-digit numbers.
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Measurement (MEA)	Place 5- and 6-digit numbers on a line, rounding to the nearest 10, 100, 1000, 10 000 or 100 000; revise using short multiplication to multiply 4-digit numbers by 1-digit numbers and use rounding to approximate answers; revise using short multiplication to multiply 4-digit amounts of money by 1-digit numbers
7	5	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Statistics (STA)	Introduce mixed numbers and turn improper fractions into mixed numbers, and vice versa; divide above the tables using vertical layout chunking (answers less than 40 then answers up to 60); choose a written or a mental method; solve division word problems, divide using a vertical layout and round up or down after division
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Statistics (STA)	Recognise fraction and decimal equivalents; use short division to divide 3- and 4-digit numbers by 1-digit numbers and by 11 and 12, writing answers as fractions then as decimals (e.g. 23 3/4, 23.75); solve division word problems (including answers with fractions); use short division to divide 3-digit by 1-digit numbers and by 11 and 12; round answers up or down after division
8	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA)	Count on and back in steps of 0.01 and 0.1 from numbers with 2 decimal places; add and subtract multiples of 0.1 or 0.01 without crossing multiples of 0.1 or 1; subtract pairs of numbers with one or two decimal places using counting up (Frog)
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA)	Count on and back in steps of 0.001 and 0.01; add and subtract multiples of 0.1, 0.01 or 0.001; add and subtract multiples of 0.01 to/from numbers with two decimal places, crossing multiples of 0.1; subtract pairs of numbers with one or two decimal places by counting up from the smaller to the larger number using Frog (e.g. 2.76 – 0.83 or 13.4 – 2.76)
9	5	Mental addition and subtraction (MAS);	Convert between grams and kilograms, millilitres and



		Mental multiplication and division (MMD); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA); Statistics (STA)	litres (mainly to one decimal place); convert between metres and kilometres, know approximate conversion between miles and km and begin to draw line graphs and read intermediate points; know regularly used imperial units and approximate metric equivalents; calculate time intervals using the 24-hour clock (less than 2 hours); read timetables using the 24-hour clock and calculate time intervals (under 3 hours)
	6	Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA); Statistics (STA)	Convert between grams and kilograms, millilitres and litres; convert between metres and kilometres, know approximate conversion between miles and km and draw line graphs and read intermediate points; know regularly used imperial units and approximate metric equivalents; calculate time intervals using the 24-hour clock and add lengths of time; read timetables using the 24-hour clock and calculate time intervals (under 3 hours)
10	5	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP); Geometry: properties of shapes (GPS)	Sort 3D shapes according to their properties and visualise 3D shapes from 2D drawings; describe properties of prisms and pyramids; compare and order fractions with related and unrelated denominators; add and subtract fractions with related denominators
	6	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP); Geometry: properties of shapes (GPS)	Recognise nets for a cube; recognise and build pyramids and prisms, making nets; use common multiples to express fractions in the same denomination; add and subtract fractions with unrelated denominators
11	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving, reasoning and algebra (PRA)	Revise mental addition and subtraction (using PV and near multiples); use short multiplication to multiply 3-digit numbers and 3-digit amounts of money by 1-digit numbers; add pairs of 5-digit numbers (5-digit answers); use decomposition to subtract pairs of 5-digit numbers.
	6	Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving, reasoning and algebra (PRA)	Use grid multiplication to multiply 3-digit numbers by 2-digit numbers; use long multiplication to multiply 3-digit numbers by numbers between 10 and 20 then 20 and 30; choose how to solve a mix of +, -, x and ÷ mental and written calculations; choose which operations(s) are necessary to solve single-step and multi-step word problems

<b>Spring Term 1</b>			
<b>Wk</b>	<b>Yr</b>	<b>Strands</b>	<b>Weekly Summary</b>
12	5	Number and place value (NPV); Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Statistics (STA)	Explore place value in 6-digit numbers (PV additions and subtractions, compare numbers); add and subtract 1, 10, 100, 1000, 10 000 and 100 000 to/from 6-digit numbers; place 6-digit numbers on number lines and round to the nearest 100 or 1000; use negative numbers in the context of temperature and calculate rises and falls in temperature; find differences between temperatures
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Mental multiplication and division (MMD); Statistics (STA)	Explore place value in 7-digit numbers (PV additions and subtractions, compare numbers); add and subtract 1, 10, 100, 1000, 10 000, 100 000 and 1 000,000 to/from 7-digit numbers; place 7-digit numbers on number lines and round to the nearest 10 000, 100 000 or 1 000 000; use negative numbers in the context of temperature and calculate rises and falls in temperature; calculate intervals across zero



13	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Written multiplication and division (WMD)	Use place value to add and subtract; add and subtract near multiples of 100 and 1000; use counting up (Frog) to subtract 4-digit numbers from multiples of 1000; subtract pairs of 2-digit numbers with one decimal place; use Frog to find change from £100; use column addition to add amounts; use Frog to find the difference between amounts of money
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Written multiplication and division (WMD); Problem solving, reasoning and algebra (PRA)	Add and subtract near multiples of powers of 10, including decimals (e.g. $\pm 2.99$ , $3.02$ ); use knowledge of the order of operations and brackets to carry out calculations; explore the order of operations using brackets (e.g. $2 + 1 \times 3 = 5$ and $(2 + 1) \times 3 = 9$ ); use Frog to find change from £100 and use column addition to add several amounts; solve multi-step word problems and use brackets to record the necessary calculations
14	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA)	Carry out place value additions and subtractions of numbers with one or two decimal places; multiply and divide by 10, 100 and 1000 (answers from two decimal places to 6-digit whole numbers); round decimals to the nearest whole and tenth; use written addition to add numbers with one or two decimal places and use rounding to estimate totals; add two or three numbers with two decimal places
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Carry out place value additions and subtractions of numbers with three decimal places; multiply and divide by 10, 100 and 1000 (answers from three decimal places to 7-digit whole numbers); round decimals to the nearest whole, tenth and hundredth; use written addition to add numbers with three decimal places in the context of measures (litres, km, kg); use rounding to estimate totals
15	5	Mental multiplication and division (MMD); Geometry: properties of shapes (GPS); Geometry: position and direction (GPD); Measurement (MEA); Statistics (STA)	Plot points and draw polygons in two quadrants; work out new co-ordinates after a translation; reflect a shape and write the new co-ordinates; draw line graphs of times tables; draw a conversion graph of imperial to metric units and use it to read off equivalent measures
	6	Mental multiplication and division (MMD); Geometry: properties of shapes (GPS); Geometry: position and direction (GPD); Measurement (MEA); Statistics (STA)	Plot points and draw polygons in all four quadrants; work out new co-ordinates after a translation or reflection; interpret and construct pie charts; draw a conversion graph of imperial to metric units and use it to read off equivalent measures
16	5	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Statistics (STA)	Find lowest common multiples and highest common factors; use mental strategies (factors and multiples) to multiply and divide by 5, 20, 6, 4 and 8; use short multiplication to multiply 4-digit numbers by 1-digit numbers; use rounding to approximate and use the commutativity of multiplication
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Statistics (STA)	Solve problems involving rate; use mental strategies (factors and multiples) to multiply and divide by 5, 20, 6, 4 and 8; solve scaling problems; multiply and divide numbers with up to two decimal places (e.g. $0.4 \times 6$ , $3.5 \div 7$ , $5 \times 0.03$ , $0.15 \div 3$ ); use long multiplication to multiply 3-digit then 4-digit numbers by numbers between 10 and 35 and use rounding to approximate

## Spring Term 2

Wk	Yr	Strands	Weekly Summary
17	5	Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and	Revise comparing fractions with related denominators using equivalence; know decimal equivalents for halves, quarters, fifths, tenths and hundredths; use mental



		proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA)	division strategies to find unit fractions of amounts; find non-unit fractions of amounts; multiply and divide to solve word problems.
	6	Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Statistics (STA)	Revise comparing fractions with unrelated denominators using equivalence; recognise equivalent fractions, decimals and percentages; find percentages of amounts; use mental division strategies to find non-unit fractions of amounts; calculate and interpret the mean as an average.
18	5	Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Measurement (MEA)	Multiply unit fractions and non-unit fractions by whole numbers; use short division to divide 3-digit numbers by 1-digit numbers, including where the first digit is less than the divisor; divide any remainders to give fractions
	6	Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Measurement (MEA)	Multiply pairs of fractions together; divide fractions by whole numbers; multiply and divide fractions; use long division to divide 3-digit numbers by 2-digit numbers; divide any remainders to give fractions
19	5	Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Find the perimeters of rectangles and composite shapes; work out missing lengths of sides in order to find perimeters; find areas of squares and rectangles in $\text{cm}^2$ or $\text{m}^2$ ; estimate the area of irregular shapes; calculate area from scale drawings; find volumes of cubes and cuboids
	6	Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Find the area of triangles; find the area of parallelograms; recognise that shapes with the same areas can have different perimeters and vice versa; find and estimate volumes of cubes and cuboids
20	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Use place value to add and subtract to/from 6-digit numbers; compare 6-digit numbers and round to the nearest 10, 100, 1000, 10 000 and 100 000; use decomposition to subtract pairs of 5-digit numbers and to subtract 4-digit numbers from 5-digit numbers; solve word problems
	6	Number and place value (NPV); Written addition and subtraction (WAS); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Measurement (MEA)	Solve problems involving similar shapes where the scale factor is known or can be found; find areas of triangles, rectangles and parallelograms; describe ratios between unequal quantities (e.g. mixing paint); solve ratio problems in context (e.g. recipes); solve problems involving unequal quantities; find percentages and link to proportion
21	5	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA)	Multiply and divide by 10, 100 and 1000; place numbers with two decimal places on a line, round to the nearest tenth or whole; use Frog (counting up) to subtract pairs of numbers with the same number of decimal places then with different numbers of decimal places (e.g. $3.2 - 1.78$ and $5.34 - 3.7$ ); use counting up to find change and differences between prices; solve subtraction word problems
	6	Mental addition and subtraction (MAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA)	Multiply and divide by 10, 100 and 1000; understand and use simple formulae; express missing number problems algebraically; find pairs of numbers that satisfy an equation with two unknowns and enumerate possibilities of combinations of two variables; generate and describe linear number sequences
22	5	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio	Use short multiplication to multiply 4-digit numbers (including amounts of money) by 1-digit numbers; use short division to divide 4-digit numbers by 1-digit numbers; revise column addition and subtraction of 4- and 5-digit numbers use place value to add and subtract;



		and proportion (FRP)	add and subtract near multiples of 100, 1000 and 10 000
	6	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP)	Use short multiplication to multiply 4-digit numbers by 1-digit numbers; use short division to divide 4-digit numbers by 1-digit numbers; divide remainders to give fractions or decimals and round up or down; use long multiplication to multiply 3-digit then 4-digit numbers by numbers between 10 and 35 and use rounding to approximate; use long division to divide 3- and 4-digit numbers by 2-digit numbers

<b>Summer Term 1</b>			
<b>Wk</b>	<b>Yr</b>	<b>Strands</b>	<b>Weekly Summary</b>
23	5	Number and place value (NPV); Mental multiplication and division (MMD); Measurement (MEA); Statistics (STA)	Compare and order negative numbers; count back in steps through 0; add and subtract 1, 10, 100, 1000, 10 000 and 100 000 to/from 6-digit numbers; place 6-digit numbers on landmarked lines and empty lines; round 6-digit numbers to the nearest 1000, 10 000, and 100 000
	6	Number and place value (NPV); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Problem solving, reasoning and algebra (PRA); Measurement (MEA); Statistics (STA)	Explore negative numbers and find intervals across 0; carry out column additions and subtractions and estimate answers; solve multi-step problems in context; use all four operations to reason and solve puzzles; explore place value and rounding up to 10 000 000
24	5	Number and place value (NPV); Mental multiplication and division (MMD); Decimals, percentages and their equivalence to fractions (DPE)	Read/write Roman numerals to 1000 (M); recognise years written in Roman numerals; revise two-place decimals and introduce three-place decimals; explore place value in numbers with three decimal places; multiply and divide by 10, 100 and 1000
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Decimals, percentages and their equivalence to fractions (DPE)	Multiply and divide decimals by whole numbers; carry out long and short multiplications; use short division, including dividing by 11 and 12; use long division to divide 3- and 4-digit numbers by 2-digit numbers; explore place value in numbers with three decimal places; multiply and divide by 10, 100 and 1000, including conversion between measures
25	5	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE)	Multiply and divide numbers mentally drawing upon known facts; solve word problems needing mental multiplication or division; introduce percentages; know equivalence between percentages and fractions; use equivalence with fractions to find percentages
	6	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE)	Carry out mental multiplications and divisions; solve ratio problems; solve problems involving similar shapes where the scale factor is known; add and subtract fractions; multiply and divide fractions; find fractions and percentages of numbers and measures including money
26	5	Problem solving, reasoning and algebra (PRA); Geometry: properties of shapes (GPS); Geometry: position and direction (GPD)	Measure and draw angles using a protractor; recognise acute, obtuse and reflex angles; know that angles on a straight line add to 180° and that angles around a point add to 360°, and use this to find missing angles; draw polygons to given dimensions and angles
	6	Problem solving, reasoning and algebra (PRA); Geometry: properties of shapes (GPS); Geometry: position and direction (GPD); Measurement (MEA); Statistics (STA)	Construct and interpret bar charts, pie charts and line graphs; investigate area and perimeter; extend and describe linear number sequences; find missing angles round a point, on a straight line, in triangles and that are vertically opposite; revise reflections and translations
27	5	<b>SATS Week</b>	
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<b>Summer Term 2</b>			
<b>Wk</b>	<b>Yr</b>	<b>Strands</b>	<b>Weekly Summary</b>
28	5	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Fractions, ratio and proportion (FRP)	Use equivalence to compare and order fractions; add and subtract fractions and mixed numbers with related denominators; revise column subtraction of 5-digit numbers; choose counting up (Frog), counting back or column subtraction
	6	Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Fractions, ratio and proportion (FRP)	Convert improper fractions to mixed numbers; add and subtract fractions and mixed numbers with related denominators; use column subtraction to subtract pairs of 5- and 6-digit numbers; choose counting up (Frog), counting back or column subtraction
29	5	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving, reasoning and algebra (PRA)	Find common multiples and common factors; solve problems requiring scaling by simple fractions; recognise and use square numbers and cube numbers; use short division to divide 4-digit numbers by 1-digit numbers, including those that leave a remainder; express remainders as fractions
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA)	Find common multiples and common factors; solve problems requiring scaling by simple fractions; investigate a general statement; describe and extend sequences; find and use ratios; use a calculator and interpret the display
30	5	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD)	Use short multiplication to multiply 4-digit numbers by 1-digit numbers; use grid method to multiply 2- and 3-digit numbers by 2-digit numbers; use long multiplication to multiply pairs of 2-digit numbers (one number less than 20) and to multiply 3-digit numbers by 2-digit numbers (where the 2-digit number is less than 20)
	6	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving, reasoning and algebra (PRA)	Use short multiplication to multiply 4-digit numbers by 1-digit numbers; use grid method to multiply 2-digit numbers by 2-digit numbers; use long division to divide 3-digit numbers by 2-digit numbers; use short multiplication to multiply 4-digit numbers by 1-digit numbers; make and test general statements; use long division to divide 3-digit numbers by 2-digit numbers
31	5	Mental addition and subtraction (MAS); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Measurement (MEA); Statistics (STA)	Read timetables using the 24-hour clock; calculate time intervals and find a time a given number of minutes or hours and minutes later; draw and interpret line graphs and read intermediate points; introduce rate and solve problems involving rate
	6	Mental addition and subtraction (MAS); Fractions, ratio and proportion (FRP); Problem solving, reasoning and algebra (PRA); Measurement (MEA); Statistics (STA)	Read timetables using the 24-hour clock; calculate time intervals and find a time a given number of minutes or hours and minutes later; begin to learn how to draw scatter graphs; draw and interpret line graphs and read intermediate points; introduce rate and solve problems involving rate
32	5	Mental addition and subtraction (MAS); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	Revise place value in numbers with three decimal places; convert between kilograms and grams, litres and millilitres, metres and kilometres; compare and order numbers with three decimal places and place on a line. Revise using counting up (Frog) to subtract pairs of numbers with two decimal places and numbers with different numbers of decimal places (1 or 2); solve subtraction word problems; use counting up to find change and differences between prices; check subtraction with addition
	6	Mental addition and subtraction (MAS); Decimals, percentages and their	Compare measures with different numbers of decimal places; investigate recurring decimals and rounding



		equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA); Measurement (MEA)	errors on a calculator; revise using counting up (Frog) to subtract pairs of numbers with two decimal places and numbers with different numbers of decimal places (1 or 2); solve subtraction word problems; use counting up to find change and differences between prices; check subtraction with addition
33	5	Number and place value (NPV); Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA)	Use long multiplication to multiply pairs of 2-digit numbers together where one is < 30; use long multiplication to multiply a 3-digit number by a 2-digit number less than 30; use rounding to estimate answers; revise multiplying fractions by whole numbers and simplifying answers; multiply mixed numbers by whole numbers
	6	Mental multiplication and division (MMD); Written multiplication and division (WMD); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE); Problem solving, reasoning and algebra (PRA)	Describe and predict patterns; make and test predictions; read recurring displays on a calculator; convert fractions to decimals using a calculator
34	5	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving reasoning and algebra (PRA); Measurement (MEA)	Revise column addition of whole numbers, decimals and money; revise column subtraction of whole numbers and counting up (Frog) to subtract decimals including money and choose a method; revise short division of 4-digit numbers, expressing remainders as fractions; solve single and multi-step problems working out which calculation(s) are necessary; understand and use equivalence
	6	Number and place value (NPV); Mental addition and subtraction (MAS); Written addition and subtraction (WAS); Mental multiplication and division (MMD); Written multiplication and division (WMD); Problem solving reasoning and algebra (PRA); Measurement (MEA)	Revise column addition of whole numbers, decimals and money; revise column subtraction of whole numbers and counting up (Frog) to subtract decimals including money and choose a method; interpret a rounding error, (e.g. 6.9999999 as 7) and read recurring displays (e.g. know that 0.3333333 represents a third); solve single and multi-step problems working out which calculation(s) are necessary; use the memory button on a calculator

