Lingfield Education Trust
Maths Medium-Term Plan & Small Steps: Year 5
Autumn Term

	Place Value	Negative Numbers	Position & Direction	Addition & Subtraction	Multiplication & Division	Perimeter & Area	Assessment
	3 weeks	1 week	2 weeks	3 weeks	3 weeks	2 weeks	1 week
National Curriculum	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit • Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 • Solve number problems and practical problems involving the above	• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	• Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction) • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 • Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers • Divide up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context • Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes	• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm2) and square metres (m2), and estimate the area of irregular shapes	• Test to be made by Maths lead to match what has been taught – do **not** just use WR End of Term Tests • Day 1 do arithmetic test • Day 2 go over and unpick the arithmetic test with loads of discussion – this **must** be given proper time • Days 3 do reasoning test • Day 4 go over and unpick the reasoning test with loads of discussion – this **must** be given proper time
Small Steps	• Represent and know value of digits to 7-digit • Partition numbers to 7-digit • 1, 10, 100, 1000, 10,000, 100,000 more • 1, 10, 100, 1000, 10,000, 100,000 more • Compare two numbers using < > = to 7-digit • Order sets of numbers to 7-digit • Round 4-digit numbers to nearest 10, 100, 1000 • Round to nearest 10, 100, 1000 within 7-digit	• Understand through ordering negative numbers including number line • Count through zero in ones and other multiples • Increases and decreases through zero • Find the difference	• Read and plot coordinates in the first quadrant • Translate a shape including coordinates • Describe a translation including coordinates • Lines of symmetry • Reflections including coordinates	**From Calculation Policy 1st NOT WR & Do CPA lessons** • Column addition of 4-digit numbers no bridging then bridging including VF • Column addition of 5-digit or more numbers with bridging including VF • Column addition of mixed PV numbers with bridging including VF • Column subtract of 4-digit numbers no exchanging then exchanging including VF • Column subtract of 5-digit or more numbers with exchanging including VF • Column subtract of mixed PV numbers with exchanging including VF • Estimate/approximate to check • Inverse to check	**From Calculation Policy 1st NOT WR & Do CPA lessons** • Multiply by 10, 100, 1000 • Divide by 10, 100,1000 • Mixed multiply and divide by 10,100, 1000 • Multiply 4 x 1 short • Multiply 2 x 2 long • Multiply 3 x 2 long • Multiply 4 x 2 long • Divide 4 by 1 using short no remainders at all including within • Divide 4 by 1 using short remainder only at end • Divide 4 by 1 using short remainder throughout	• Perimeter of rectangles • Perimeter of compound rectilinear shapes • Perimeter of polygons • Area of rectangles • Area of compound shapes	
Enrichment	Block Opener/Assembly on Careers linked to unit	Block Opener/Assembly on Careers linked to unit	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (16-20.10.23)	Block Opener/Assembly on Careers linked to unit World Statistics Day (20.10.23)	Block Opener/Assembly on Careers linked to unit WR Barvember (November)	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (11-15.12.23)	LET Christmas Problems & Puzzles

Lingfield Education Trust
Maths Medium-Term Plan Small Steps: Year 5
Spring Term

	Volume	Multiplication & Division	Fractions	Statistics	Decimals and Percentages	Assessment
	1 week	2 weeks	6 weeks	1 weeks	3 weeks	1 week
National Curriculum	• Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity • Estimate volume and capacity [for example, using water]	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 1 • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number • Compare and order fractions whose denominators are all multiples of the same number • Add and subtract fractions with the same denominator, and denominators that are multiples of the same number • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number (Y4)	• Complete, read and interpret information in tables, including timetables	• Read, write, order and compare numbers with up to 3 decimal places • Read and write decimal numbers as fractions • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • Solve problems involving numbers up to 3 decimal places • Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place • Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction	• Test to be made by Maths lead to match what has been taught – do **not** just use WR End of Term Tests • Day 1 do arithmetic test • Day 2 go over and unpick the arithmetic test with loads of discussion – this **must** be given proper time • Days 3 do reasoning test • Day 4 go over and unpick the reasoning test with loads of discussion – this **must** be given proper time
Small Steps	• Count volume using cubes • Compare volumes • Estimate volume • Estimate capacity	• Multiples then common multiples • factors • Common factors • Prime numbers • Square numbers • Cube numbers	**From policy for fraction calculating methods – must be school consistency!** • Find fractions equivalent to a unit fraction – use as fractions reminder session • Find fractions equivalent to a non-unit fraction • Convert improper to mixed • Convert mixed to improper • Compare and order fractions less than one • Compare and order fractions more than one • Add and subtract fractions with same denominator (mixed lesson as Y4 revision) • Add fractions with diff denom within 1 • Add fractions with diff denom beyond 1 • Add a fraction to a mixed number • Add 2 mixed numbers • Subtract fractions with diff denom • Subtract fraction from mixed • Subtract two mixed numbers • Multiply fractions by integers • Multiply a mixed number by an integer • Fractions of amounts – 2 lessons	• Read and interpret tables • Read and interpret two way tables • Read and interpret timetables	• Decimals to 2dp • Equivalent fractions and decimals tenths • Equivalent fractions and decimals hundredths • Thousandths as fractions and decimals • Order and compare decimals same amount of PV places • Order and compare decimals any amount of PV places • Round decimals to wholes and tenths • Understand percentages & Percentages as fractions • Percentages as decimals • FDP Equivalence	
Enrichment	Block Opener/Assembly on Careers linked to unit International Puzzle Day (29.01.24)	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (05-09.02.24) NSPCC Number Day (02.02.24)	Block Opener/Assembly on Careers linked to unit World Maths Day (23.03.24)	Block Opener/Assembly on Careers linked to unit	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (11-15.03.24)	LET Easter Problems & Puzzles

Lingfield Education Trust
Maths Medium-Term Plan Small Steps: Year 5
Summer Term

	Decimals	Measurement	Properties of Shape	Statistics	Time	Consolidation	Assessment
	2 weeks	2 weeks	3 weeks	1 week	1 week	1 week	1 week
National Curriculum	• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • Solve problems involving number up to 3 decimal places • Read, write, order and compare numbers with up to 3 decimal places • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000	• Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints •	• Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • Draw given angles, and measure them in degrees (°) • Identify angles at a point and 1 whole turn (total 360°) • Identify: angles at a point and 1 whole turn (total 360°); angles at a point on a straight line and half a turn (total 180°) • Use the properties of rectangles to deduce related facts and find missing lengths and angles • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles • Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	• Solve comparison, sum and difference problems using information presented in a line graph	• Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals • Solve problems involving converting between units of time • Convert units of time • Calculate with timetables •	Use these weeks as spares in case of coverage issues and to revisit the following units: Place value All four operations Fractions	• Test to be made by Maths lead to match what has been taught – do **not** just use WR End of Term Tests • Day 1 do arithmetic test • Day 2 go over and unpick the arithmetic test with loads of discussion – this **must** be given proper time • Days 3 do reasoning test • Day 4 go over and unpick the reasoning test with loads of discussion – this **must** be given proper time
Small Steps	• Multiply decimals by 10, 100, 1000 • Divide decimals by 10,100, 1000 • Add decimals including with different PV • Subtract Decimals with different PV	• Kilograms and kilometres • Millimetres and millilitres • Converting units • Units of time • Converting with imperial units	• Degrees and classify angles • Estimate and measure angles up to 180 • Draw lines accurately – teacher assess 22 • Calculate angles within right angles • Calculate angles on a straight line • Calculate angles around a point • Lengths and angles in shapes • Regular and irregular polygons – teacher assess 21 • 3d shapes	• Draw line graphs • Read and interpret line graphs	• Roman Numerals to 1000 • Calculate time durations		
Enrichment	Block Opener/Assembly on Careers linked to unit	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (20-24.05.24 National Numeracy Day (15.05.24) Women in Maths Day (12.05.24)	Block Opener/Assembly on Careers linked to unit My Money Week (12-16.06.24) Alan Turing Day (23.06.24) Allow you pupils practice on the maths orienteering course this term ready for the competition next term.	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust TTRS Competition (01-05.07.24) MP Maths Orienteering Competition for all year groups (01-05.07.24)	Block Opener/Assembly on Careers linked to unit Lingfield Education Trust maths Challenge (12.07.24)	LET Summer Problems & Puzzles	LET Summer Problems & Puzzles