

## Year 4 MTP-Autumn Term

Power Maths Unit	Wk	National Curriculum Objective	Small Steps
Unit 1 Place Value-4 digit numbers	1	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)</li> <li>Count in multiples of 6, 7, 9, 25 and 1,000</li> <li>Identify, represent and estimate numbers using different representations</li> </ul>	Represent and partition numbers to 1000, Number line to 1000, Partition 4 digit numbers, Multiples of 1000 4 digit numbers
	2	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)</li> <li>Find 1,000 more or less than a given number</li> </ul>	Partition 4 digit numbers flexibly 1,10,100,1000 more or less 1000s, 100s, 10s and 1s
Unit 2 Place Value-4 digit numbers	3	<ul style="list-style-type: none"> <li>identify, represent and estimate numbers using different representations</li> <li>Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)</li> <li>Order and compare numbers beyond 1,000</li> <li>Round any number to the nearest 10, 100 or 1,000</li> </ul>	Number line to 10,000 Between 2 multiples Estimate on a number line to 10,000, Compare and order numbers to 10,000 Round and order numbers to 10,000
	4	<ul style="list-style-type: none"> <li>Round any number to the nearest 10, 100 or 1,000</li> </ul>	Round to the nearest 100, Round to the nearest 10, Round to the nearest 1000, 100,10
Unit 3 Addition and Subtraction (2)	5	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> </ul>	Add and subtract 1s,10s,100s,1000s, Add two 4 digit numbers, Add two 4 digit numbers (one exchange), Add with more than one exchange, Subtract two 4 digit numbers
	6	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> </ul>	Subtract two 4 digit numbers (one exchange), Subtract two 4 digit numbers (more than one exchange), Exchange across two columns, Efficient methods, Equivalence difference
	7	<ul style="list-style-type: none"> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two- step problems in contexts, deciding which operations and methods to use and why</li> </ul>	Estimate answers, Check strategies, Problem solving (one step), Problem solving (comparison), Problem solving (two steps)
Unit 3 Cont	1	<ul style="list-style-type: none"> <li>solve addition and subtraction two- step problems in contexts, deciding which operations and methods to use and why</li> </ul>	Problem solving (multi step)
Unit 4 Measurer Area	2	<ul style="list-style-type: none"> <li>Find the area of rectilinear shapes by counting squares</li> <li>Estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>	What is area? Measure area using squares, Count squares, Make shapes Compare area
Unit 5 Multiplication and	3	<ul style="list-style-type: none"> <li>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>	Multiples of 3, Multiply and divide by 6, 6 times tables and division facts, Multiply and divide by 9, 9 times tables and division facts

	4	<ul style="list-style-type: none"> <li>• Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>• use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> </ul>	The 3,6 and 9 times tables, Multiply and divide by 7, 7 times tables and division facts, 11 and 12 times tables and division facts, Multiply by 1 and 0.
	5	<ul style="list-style-type: none"> <li>• use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> </ul>	Divide by 1 and itself, Multiply by 3 numbers

## Year 4 MTP-Spring Term

Power Maths Unit	Wk	National Curriculum Objective	Small Steps
Unit 6 Multiplication and Division (2)	1	<ul style="list-style-type: none"> <li>Recognise and use factor pairs and commutativity in mental calculations</li> </ul>	Factor pairs, Multiply and divide by 10, Multiply and divide by 100, Related facts (x), Related facts ( $\div$ ),
	2	<ul style="list-style-type: none"> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> </ul>	Multiply and add, Solve multiplication problems  Informal written methods, Multiply 2 digit by 1 digit, Multiply 3 digits by 1 digit,
	3	<ul style="list-style-type: none"> <li>recognise and use factor pairs and commutativity in mental calculations</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> </ul>	Basic division, correspondence problems Division and remainders, Divide 2 digit numbers, Divide 3 digit numbers,
	4	<ul style="list-style-type: none"> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</li> </ul>	Efficient multiplication
Unit 7 Len	5	<ul style="list-style-type: none"> <li>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> <li>measure the perimeter of simple 2D shapes</li> </ul>	Compare lengths, Add lengths, Subtract lengths, Measure perimeter, Calculate perimeter
	6	<ul style="list-style-type: none"> <li>measure the perimeter of simple 2D shapes</li> </ul>	Problem Solving-length
Unit 8 Fractions	1	<ul style="list-style-type: none"> <li>Non-statutory guidance: They practise counting using simple fractions and decimals, both forwards and backwards</li> <li>Reason about the location of mixed numbers in the linear number system (Ready to progress criteria (4F–1))</li> <li>Convert mixed numbers to improper fractions and vice versa (Ready to progress criteria (4F–2))</li> </ul>	Count beyond 1,  Partition a mixed number, Number lines with mixed numbers, Compare and order mixed numbers, Convert mixed numbers to improper fractions
	2	<ul style="list-style-type: none"> <li>Convert mixed numbers to improper fractions and vice versa (Ready to progress criteria (4F–2))</li> <li>recognise and show, using diagrams, families of common equivalent fractions</li> </ul>	Convert improper fractions to mixed numbers, Equivalent fractions, Equivalent fraction families, Simplifying fraction
Unit 9 Fractions (2)	3	<ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator</li> <li>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</li> </ul>	Add/subtract 2 or more fractions, add fractions and mixed numbers, Subtract from mixed numbers, Subtract from whole numbers  Problem solving (+/-) fractions
	4	<ul style="list-style-type: none"> <li>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</li> </ul>	Problem solving (+/- fractions), Problem solving (fraction of amount) Fraction of an amount

Unit 10 Decimals	5	<ul style="list-style-type: none"> <li>•recognise and write decimal equivalents of any number of tenths or hundredths</li> </ul>	Tenths as fractions, tenths as decimals, Tenths on a pv grid, Tenths on a number line (2)
	6	<ul style="list-style-type: none"> <li>•find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>•recognise and write decimal equivalents of any number of tenths or hundredths</li> </ul>	Divide 1 digit by 10, Divide 2 digits by 10, Hundredths as fractions, Hundredths as decimals, Hundredths on a pv grid
		<ul style="list-style-type: none"> <li>•find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> </ul>	Divide $\frac{1}{2}$ digits by 100, Dividing by 10,100

## Year 4 MTP-Summer Term

PM Unit	Wk	National Curriculum Objective	Small Steps
Unit 11 Decimals	1	<ul style="list-style-type: none"> <li>recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>recognise and write decimal equivalents of any number of tenths or hundredths 4 4C Number – fractions (including decimals and percentages) 11 Decimals (2) 4 Compare decimals compare numbers with the same number of decimal places up to two decimal places</li> </ul>	Make a whole, Partitioning decimals, Flexible partitioning decimals, Compare decimals, Order decimals
	2	<ul style="list-style-type: none"> <li>round decimals with one decimal place to the nearest whole number</li> <li>recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> </ul>	Round to the nearest whole, Halves and quarters as decimals
Unit 12 Money	3	<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>	Write money using decimals, Convert between pounds and pence, Compare amounts of money, Estimate with money, Calculate with money
	4	<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>	Solve problems with money
Unit 13 Time	5	<ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> </ul>	Year, months, weeks and days, Hours, minutes and seconds, Convert between analogue and digital times, Convert to 24 hr clock, Problem solving (converting time)
Unit 14 Angles and 2D shapes	6	<ul style="list-style-type: none"> <li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> </ul>	Identify angles, Compare and order angle, Triangles, Quadrilaterals, Polygons,
Unit 14 Continued	1	<ul style="list-style-type: none"> <li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>identify lines of symmetry in 2D shapes presented in different orientations</li> <li>complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul>	Reasoning about polygons,  Lines of symmetry Complete a symmetric figure
Unit 15 Statistics	2	<ul style="list-style-type: none"> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> </ul>	Interpret charts, Solve problems with charts (2), Interpret graphs (2)
	3	<ul style="list-style-type: none"> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> </ul>	Draw line graphs
Unit 16 Position And		<ul style="list-style-type: none"> <li>Describe positions on a 2D grid as coordinates in the first quadrant</li> <li>plot specified points and draw sides to complete a given polygon</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> </ul>	Describe position, Describe position using coordinates, Plot coordinates, Draw 2D shapes on a grid, Translate on a grid,
		<ul style="list-style-type: none"> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> </ul>	Describe translations on a grid