



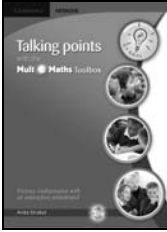
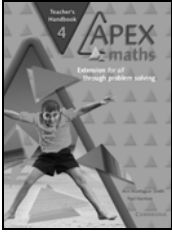
Year 4

Block A: Counting, partitioning and calculating

Unit 1

Objectives for this unit	Mult-e-Maths activities
Report solutions to puzzles and problems, giving explanations and reasoning orally and in writing, using diagrams and symbols	See references on page 2 to <i>Talking points with the Mult-e-Maths Toolbox</i> and <i>Apex Maths 4</i> .
Partition, round and order four-digit whole numbers; use positive and negative numbers in context and position them on a number line; state inequalities using the symbols < and >	<p>CN4S8 What's the largest number? Trying to make the largest 4-digit number using 4 random digits that are revealed one at a time</p> <p>CN4S9 Estimating using a number line Making and justifying estimates of positions of numbers on number lines</p> <p>CN4S11 Comparing temperatures Using a thermometer scale to compare negative numbers in the context of temperature</p> <p>CN4S13 Negative numbers Adding and subtracting to/from positive and negative numbers using a number line</p> <p>CN4L3 Understanding place value Understanding the place value of numbers to at least 10 000</p> <p>CN4L4 Comparing numbers Comparing 4-digit numbers and recording comparisons using < and > symbols</p> <p>CN4L5 Negative numbers Recognising and comparing negative numbers</p>
Recognise and continue number sequences formed by counting on or back in steps of constant size	<p>CN4S2 Counting in 10s, 100s and 100s Counting on and back in tens, hundreds and thousands from numbers with different numbers of digits</p> <p>CN4L1 Steps of 10, 100 and 1000 Counting in repeated steps of 10, 100 and 1000 to solve additions and subtractions</p>
Use knowledge of addition and subtraction facts and place value to derive sums and differences of pairs of multiples of 10, 100 or 1000	<p>NF4S1 Make 1000 Finding how many need to be added to a given multiple of 50 to make 1000</p> <p>NF4L1 Using addition and subtraction facts Applying number facts to additions and subtractions involving multiples of 10, 100 and 1000</p>
Add or subtract mentally pairs of two-digit whole numbers	<p>CA4S3 Near doubles Identifying near doubles and using doubles to find their totals</p> <p>CA4S4 Related number facts Using understanding of addition and subtraction and the relationship between them to give related number facts</p> <p>CA4L1 Finding differences Finding differences, focusing on counting up</p>
Derive and recall multiplication facts up to 10 × 10, the corresponding division facts and multiples of numbers to 10 up to the tenth multiple	NF4L4 Identifying multiples Identifying and investigating multiples of numbers to 10
Multiply and divide numbers to 1000 by 10 and then 100 (whole-number answers), understanding the effect; relate to scaling up or down	CA4L9 Multiplying and dividing by 10 Investigating the effect of multiplying and dividing by 10
Identify the doubles of two-digit numbers; use these to calculate doubles of multiples of 10 and 100 and derive the corresponding halves	<p>NF4S4 Doubles of numbers to 20 and halves Practising giving doubles of whole numbers to 20 and their corresponding halves</p> <p>NF4L2 Doubles of 2-digit numbers and halves Doubling and halving by partitioning first, and using doubles and halves to multiply and divide</p>
Use a calculator to carry out one-step and two-step calculations involving all four operations; recognise negative numbers in the display, correct mistaken entries and interpret the display correctly in the context of money	CA4L16 Using a calculator Using a calculator for a range of 1-step and 2-step calculations, including in the context of money
Use knowledge of rounding, number operations and inverses to estimate and check calculations	CA4L16 (above) also links to this objective.

End-of-year expectations for this unit are in **bold**.

Vocabulary			
<p>problem, solution, calculate, calculation, equation, operation, answer, method, explain, predict, reason, reasoning, pattern, relationship, rule, sequence, place value, partition, thousands, digit, four-digit number, decimal point, decimal place, tenths, hundredths, positive, negative, above/below zero, compare, order, greater than (>), less than (<), equal to (=), round, estimate, approximately, add, subtract, multiply, divide, sum, total, difference, plus, minus, product, quotient, remainder, calculator, display, key, enter, clear, constant, pound (£), penny/pence (p), units of measurement and their abbreviations, degrees Celsius (°C)</p>		<p>Use <i>A Maths Dictionary for Kids</i> when discussing mathematical vocabulary for this unit.</p> 	
Other resources			
<p>Use the following <i>Mult-e-Maths Toolbox</i> tools for this unit:</p> <ul style="list-style-type: none"> • Place value chart • Place value mat • Number lines • Number grids • Multiplication grid from number grid tool • Function machine • Multiplication grid from number grid tool • Calculator 		<p>Use activity N4.7 Addition tables from <i>Talking points with the Mult-e-Maths Toolbox</i> to develop reporting of solutions for problems based on the knowledge of addition and subtraction facts.</p> 	<p>Use activity 1 What are we?, activity 2 Sum puzzle or activity 21 Grid totals from <i>Apex Maths 4</i> to practise mental addition strategies and reasoning about numbers.</p> 
			<p>Use <i>Perfect Times</i> to practise recall of multiplication facts.</p> 