

Addition, Subtraction, Multiplication and Division: Players, Are You Ready?

<p>Aim: Perform mental calculations, including with mixed operations and large numbers.</p> <p>I can perform mental calculations with increasingly large numbers using all four operations.</p>	<p>Success Criteria:</p> <p>I can partition into thousands, hundreds, tens, ones and tenths, adding the most significant digit first.</p> <p>I can add or subtract the nearest multiple of ten or 100, then adjust.</p> <p>I can identify near doubles.</p> <p>I can multiply or divide by four or eight by repeated doubling or halving.</p> <p>I can form an equivalent calculation.</p>	<p>Resources:</p> <p>Lesson Pack Coloured counters</p>
	<p>Key/New Words:</p> <p>Multiple, add, plus, subtract, minus, take away, sum, total, nearest, partition, partitioning, repeated steps, mental, strategy, adjust, nearest multiple, doubling, halving, equivalent calculation, multiply, multiplication, lots of, groups of, divide, division.</p>	<p>Preparation:</p> <p>Target Decimal Board - 1 per pair Mental Calculations Four-in-a-Row Game - 1 per pair Four-in-a-Row Record Sheet - 1 per child Extra Challenge Activity Sheet - as required Strategy Poster Pack - as required</p>

Prior Learning: It will be helpful if children have a secure understanding of place value, multiplication facts and corresponding number facts.

Learning Sequence

	<p>How Much? In pairs, children have a Target Decimal Board. Ask children to add or subtract at least two numbers on their board to find; the highest whole number, the smallest whole number, the number closest to 100 and the smallest number with three decimal places. Then one child in each pair selects a number from the board. This will be the target number. In pairs, children create calculations (including numbers with decimals) to make the target number. Repeat.</p>	
	<p>Practice Round: Revise mental strategies by talking through the information on the Lesson Presentation. Repeat with additional examples if necessary.</p>	
	<p>Players, Are You Ready? Using the Lesson Presentation, the children look at each of the questions and decide which method is the most efficient to calculate the answer. <i>Can the children explain how they completed each calculation? Which mental calculation method did they choose? Did anybody use a different mental calculation method?</i></p>	
	<p>Four-in-a-Row: In pairs, the children take it in turns to select and complete a calculation on the Mental Calculations Four-in-a-Row Game. The children show their workings on the Four-in-a-Row Record Sheet. Once the calculation has been completed, the child can place their coloured counter over the calculation. The first child to get four in a row wins. Remind children to check their answers once the calculations have been completed. Support can be given through displaying Strategy Poster Pack around the classroom and/or on tables.</p>	
	<p>In pairs, the children take it in turns to select and complete a calculation on the Mental Calculations Four-in-a-Row Game by selecting and using an appropriate mental calculation method to complete the whole number and simple decimal questions.</p>	
	<p>In pairs, the children take it in turns to select and complete a calculation on the Mental Calculations Four-in-a-Row Game by selecting and using an appropriate mental calculation method to complete the whole number and decimal questions.</p>	
	<p>In pairs, the children take it in turns to select and complete a calculation on the Mental Calculations Four-in-a-Row Game by selecting and using an appropriate mental calculation method to complete the two-step calculation questions. An Extra Challenge Activity Sheet is provided as an extension activity if required.</p>	
	<p>Calculation Countdown: The children write their own questions based on the objective of the lesson. These questions can then be selected randomly and used with the rest of the class. <i>Can the children work out the answers to the questions using a mental method?</i></p>	

Masterit

Practiseit: Let your children practise their mental skills using this fabulous [Addition Pyramids Activity Sheet](#).

Createit: Children create their own game to practise mental calculations.