

Year Five: Block A: Unit 2: Addition and Subtraction	
Learning Objectives	Resources
<p>Using and applying mathematics</p> <ul style="list-style-type: none"> Solve one-step and two-step problems involving whole numbers and decimals and all four operations, choosing and using appropriate calculation strategies, including calculator use <p>Knowing and using number facts</p> <ul style="list-style-type: none"> Use knowledge of place value and addition and subtraction of two-digit numbers to derive sums and differences and doubles and halves of decimals <p>Calculating</p> <ul style="list-style-type: none"> Use efficient written methods to add and subtract whole numbers and decimals with up to two places 	<p>100 number square Digit cards Mini-whiteboard Calculators Stopwatches</p> <hr/> <p>Vocabulary</p> <p>problem, solution, calculate, calculation, equation, operation, answer, method, explain, reasoning, reason, predict, relationship, rule, formula, pattern, sequence, term, consecutive</p>
Success Criteria	Curriculum Links
<p>I can explain why I chose to work mentally, or use a written method or a calculator I can work out sums and differences of decimals I can explain each step when I add or subtract decimals using a written method I can decide when it is sensible to use a written method for addition or subtraction</p>	<p>Science – get the children to use their subtraction skills when working with data collected during investigations</p> <hr/> <p>ICT Activities</p> <p>Handling data – get the children to explore how to use formulas in spreadsheets to calculate addition and subtraction answers</p>

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	Mental/Oral Starter	Shared Learning	Independent and Group Tasks	Plenary
Monday	<p>Display a 100 number square on the board and provide the children with a set of digit cards. Point to the number 28 and get the children to calculate the number bond to 100. They can display the answer using their digit cards.</p> <p>Repeat by pointing to other numbers on the number square for the children to identify the number bonds to make 100. Gradually increase the speed by which you are pointing to the numbers.</p>	<p>Show the children a calculator. Ask them to describe different calculations that they could perform on the calculator. Discuss with the class when they might use a calculator and or work out the numbers mentally or on paper.</p> <p>Write the following calculation on the board: $145 + 237$. Discuss with the class whether they could work out the answer of 382 mentally or using a calculator. Get the children to practise calculating the answer mentally. Provide them with a mini-whiteboard so that they could jot down their ideas.</p> <p>Bring the class back together and get the children to identify the different methods they used to calculate the answer i.e. partitioning, counting on etc. Get them to describe the jottings that they used to help them calculate the answer.</p> <p>Discuss with the class whether they think they could calculate the answer quicker on a calculator. Explain to the children that they should only use a calculator when they can make sense of the answer and be able to recognise when they have keyed in the wrong numbers. Get the children to suggest some calculations they could perform quicker on a calculator.</p>	<p>Core/Extension (activity 1a) Split the children into pairs and get each child to make a list of ten addition calculations working with two digit numbers and ten calculations working with decimals and four digit numbers. Tell the children to time how long it takes them to calculate the first list using mental calculations and the second list using a calculator.</p> <p>Support (activity 1b) Split the children into pairs and get each child to make a list of ten addition calculations working with numbers to 50 and ten calculations working four digit numbers. Tell the children to time how long it takes them to calculate the first list using mental calculations and the second list using a calculator.</p>	<p>Get some children to call out pairs of two digit numbers for the rest of the class to practise adding mentally.</p>