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| **Year 4 - Building and assessing the conceptual understanding and learning – Addition and Subtraction** | | |
| **End of Year Expectations:**   * add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds * add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction * estimate the answer to a calculation and use inverse operations to check answers * solve problem including missing numbers using number facts, place value and complex addition and subtraction | | **Non-statutory guidance:**  Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency (see Appendix 1 of national curriculum document.)  . |
| **Autumn** | **Spring** | **Summer** |
| * Continue to practise and refine methods and strategies for adding / subtracting (in line with calculation policy) * Solve one and two step problems (in different contexts) involving addition and subtraction, making decisions about which operations are needed for each step. * Where appropriate, use inverse operations to check calculations. * Make decisions about when to use mental/written methods and /or jottings based on the numbers involved. * Solve addition and subtraction problems in a range of contexts, including measures, money and time.   **See NCETM “Teaching for Mastery” Year 4 book – addition and subtraction.**  https://www.ncetm.org.uk/public/files/23305622/Mastery\_Assessment\_Y4\_Low\_Res.pdf | * Solve one and two step problems (in different contexts) involving addition and subtraction, making decisions about which operations are needed for each step. * Continue to practise and refine methods and strategies for adding / subtracting - beginning to work with four-digit numbers (in line with developing understanding of numbers, the number system and place value) * Add and subtract in the context of money in pound and pence. * Use inverse operations to check calculations. * Make decisions about when to use mental/written methods and /or jottings based on the numbers involved. * Solve one and two steps problems involving addition and subtraction in a range of contexts, including measures, money and time. | * Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. * Continue to develop and refine mental methods. * Add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction where appropriate * Estimate and use inverse operations to check answers to a calculation |

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| **Key questions:**   * Can I confidently use resources (dienes, place value counters) to add/subtract two and three digit numbers, explaining clearly what I am doing and recording alongside? * Can I use informal/formal methods and strategies for adding /subtracting (in line with calculation policy) in the context of one and two step problems? * When it is appropriate, can I use the inverse operations to check calculations? * Can I make sensible decisions about when to use mental/written methods and /or jottings based on the numbers involved? * Can I use and apply a range of written and mental strategies to solve addition and subtraction problems in a range of contexts e.g. money, measures, time | **Key questions:**   * Can I solve one and two step problems (in different contexts) involving addition and subtraction, making decisions about which operations are needed for each step? * Can I use written methods and strategies for adding / subtracting - beginning to work with four-digit numbers? (in line with developing understanding of numbers, the number system and place value) * Can I add and subtract in the context of money in pounds and pence? * Where appropriate, can I use inverse operations to check calculations? * Can I make decisions about when to use mental/written methods and /or jottings based on the numbers involved? * Can I use and apply a range of written and mental strategies to solve addition and subtraction problems in a range of contexts? E.g. money, measure, time | **Key questions:**   * Can I solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why? * When it’s appropriate, can I add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction, confidently explaining what I have done using the language of place value? * Can I make reasonable estimates about what the answer might be, and, where appropriate, use inverse operations to check answers to a calculation? |