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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?
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