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| **Year 6 - Building and assessing the conceptual understanding and learning – algebra** | | | |
| **End of Year Expectations:**  Pupils should be taught to:   * use simple formulae * generate and describe linear number sequences * express missing number problems algebraically * find pairs of numbers that satisfy an equation with two unknowns * enumerate possibilities of combinations of two variables.   **See NCETM “Teaching for Mastery” Year 6 book – algebra.**  <https://www.ncetm.org.uk/public/files/23305653/Mastery_Assessment_Y6_Low_Res.pdf> | | **Non-statutory guidance:**  Pupils should be introduced to the use of symbols and letters to represent variables and unknowns in mathematical situations that they already understand, such as:   * missing numbers, lengths, coordinates and angles * formulae in mathematics and science * arithmetical rules (e.g. a + b = b + a) * generalisations of number patterns * number puzzles (e.g. what two numbers can add up to). | |
| **Autumn** | **Spring** | | **Summer** |
| * use simple formulae * generate and describe linear number sequences * express missing number problems algebraically * find pairs of numbers that satisfy an equation with two unknowns * enumerate possibilities of combinations of two variables.   **Make links to geometry and measures:**   * recognise when it is possible to use formulae for area and volume of shapes   From non-statutory guidance for geometry:   * Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements.   These relationships might be expressed  algebraically  e.g. d = 2 × r; a = 180 - (b + c). | * use simple formulae * generate and describe linear number sequences * express missing number problems algebraically * find pairs of numbers that satisfy an equation with two unknowns * enumerate possibilities of combinations of two variables.   **Make links to geometry and measures:**   * recognise when it is possible to use formulae for area and volume of shapes   From non-statutory guidance for geometry:   * Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements.   These relationships might be expressed  algebraically  e.g. d = 2 × r; a = 180 - (b + c). | | Revision  Continue to use and apply understanding of algebra in transition units |

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| **Key questions:**  Can I show that I understand the use of symbols and letters to represent variables and unknowns e.g:   * missing numbers, lengths, coordinates and angles * formulae in mathematics and science * arithmetical rules (e.g. a + b = b + a) * generalisations of number patterns * number puzzles (e.g. what two numbers can add up to). | **Key questions:**  Can I show that I understand the use of symbols and letters to represent variables and unknowns e.g:   * missing numbers, lengths, coordinates and angles * formulae in mathematics and science * arithmetical rules (e.g. a + b = b + a) * generalisations of number patterns * number puzzles (e.g. what two numbers can add up to). | **Key questions:** |