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| **Jericho Primary School -Calculation Policy – Subtraction – Year 1** | |
| Mental Calculations | **Read, write and interpret mathematical statements using symbols +, -, =**   * - Represent and use number bonds and related subtraction facts within 20 * Children know that working systematically helps them to find all * the possible number bonds to 20. * - Subtract one digit and two-digit numbers up to 20, including zero. * Children explore subtraction by counting back from a given number. * Children know the importance of ten ones equalling one ten. * - Solve one-step problems using concrete objects and pictorial representations, and missing number problems such as: \_\_\_ - 9 = 11 * - Given a number, identify (and use the language) one less |
| Written calculation | -**Read, write and interpret mathematical statements using symbols +, -, =**    - Represent and use number bonds and related subtraction facts within 20.    - Subtract one digit and two-digit numbers up to 20, including zero.    - Solve one-step problems using concrete objects and pictorial representations, and missing number problems such as: \_\_\_\_ - 9 = 11  \_ Know fact families to 20  - Given a number, identify (and use the language) one less |
| Representations  to support calculations | Golden Nugget representations:    Other representations: |
| **Jericho Primary School -Calculation Policy – Subtraction – Year 2** | |
| Mental Calculations | **Subtract numbers using concrete objects, pictorial representations, and mentally, including:**   * - a two-digit number and ones to 100 * Children should know that ten ones equals one ten and to count back from the larger number * - a two-digit number and tens * - two, two-digit numbers to 100 * - adding three one-digit numbers * Children should find number bonds to 10 or doubles for efficiency. * Recall and use and subtraction facts to 20 facts fluently, and derive and use related facts up to 100. |
| Written calculation | **Subtract numbers using concrete objects, pictorial representations, abstract representations and mentally, including:**   * - a two-digit number and ones   57 -8=   * - a two-digit number and tens   63 – 30 =   * - two, two-digit numbers crossing 10   Introduce the expanded method of the column method to prepare for  formal written methods with larger numbers  70 + 6  -40 + 3  \_\_\_\_\_  only use the column method with exchanging if children are confident completing with Base 10 and the expanded method.   * Re-partition numbers * Use a hundred square * Check calculations using inverse and by subtracting numbers in different order |
| Representations  to support calculations | Golden Nugget representations:    Other representations:      bar models are useful for finding missing numbers. |

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| **Jericho Primary School -Calculation Policy – Subtraction – Year 3** | |
| Mental Calculations | **Subtract numbers mentally, including:**   * -a three-digit number and ones * -a three-digit number and tens * -a three-digit number and hundreds * -Partition all numbers and recombine, * start with TU - TU then HTU - TU |
| Written calculation | **Subtract numbers with up to three digits, using formal written (columnar) methods**   * Subtract to three digit numbers using physical and abstract representations (e.g. Base 10, place value counters, empty number lines) * Children know that the column method is the usually most efficient method and move onto abstract method when exchanging concept is embedded. * Children are taught to exchange appropriately. * Children to exchange from the next place value column and recombine.      * Estimate the answer to a calculation and use inverse operations to check answers. * Solve problems, including missing number problems, using number facts, place   value, and more complex subtraction. |
| Representations  to support calculations | Golden Nugget representations:      Other representations:      Bar models are useful for finding missing numbers. |

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| **Jericho Primary School -Calculation Policy – Subtraction – Year 4** | |
| Mental Calculations | **Practise mental methods with increasingly large numbers.**   * Consolidate partitioning and re-partitioning * 550 - 320 = 550 - 300 - 20 * = 250 - 20 * = 230 * Use compensation for subtracting too much/little and adjusting * Use Base 10, place value counters, empty number lines etc. |
| Written calculation | **Subtract numbers with up to 4 digits using the formal written methods of columnar where appropriate.**   * Children know that the column method is the usually most efficient method. Children are taught to exchange and recombine appropriately. * Children to place exchanged value as shown. * Include decimal subtraction for money.        * Estimate and use inverse operations to check answers to a calculation. * Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why. |
| Representations  to support calculations | Golden Nugget representations:      Other representations:      Bar models are useful for finding missing numbers/inverse operations. |

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| **Jericho Primary School -Calculation Policy – Subtraction – Year 5** | |
| Mental Calculations | **Practise mental methods with increasingly large numbers.**   * Eg 12 462 – 2300 = 10 162) * Use compensation for subtracting too much/little and adjusting * Use Base 10, place value counters, empty number lines etc. |
| Written calculation | **Subtract numbers with more than 4 digits using the formal written methods of columnar where appropriate.**   * Children know that the column method is the usually most efficient method. Children are taught to exchange and recombine appropriately. * Children to place exchanged value as shown. * Include decimal subtraction      * use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. * Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why. |
| Representations  to support calculations | Golden Nugget representations:      Other representations:      Bar models are useful for finding missing numbers/inverse operations. |

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| **Jericho Primary School -Calculation Policy – Subtraction – Year 6** | |
| Mental Calculations | **Perform mental calculations, including with mixed operations and large numbers**   * Children use representation of choice. * Consolidate partitioning and re-partitioning. * Use compensation for subtracting too much/little and adjusting |
| Written calculation | **Add larger numbers with more than 5 digits using the formal written methods of columnar where appropriate.**   * Children know that the column method is the usually most efficient method. Children are taught to exchange and recombine appropriately. * Children to place exchanged value as shown. * Include decimal subtraction.        * Use their knowledge of the order of operations to carry out calculations involving the * four operations. * Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why. |
| Representations  to support calculations | Golden Nugget representations:      Other representations:      Bar models are useful for finding missing numbers/inverse operations. |