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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 |
| Representationsto 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 forformal written methods with larger numbers70 + 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
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| Representationsto 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. |
| Representationsto 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.
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| Representationsto 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.
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| Representationsto 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.
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| Representationsto support calculations | Golden Nugget representations:   Other representations:  Bar models are useful for finding missing numbers/inverse operations. |