| Year 6 Calculation Policy |  |  |
| :---: | :---: | :---: |
|  | Addition \& Subtraction | Multiplication and Division |
|  | - perform mental calculations, including with mixed operations and large numbers <br> - use their knowledge of the order of operations to carry out calculations involving the four operations (BODMAS) <br> - use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy <br> - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why <br> - Solve problems involving addition, subtraction, multiplication and division | - multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication <br> - use their knowledge of the order of operations to carry out calculations involving the four operations (BODMAS) <br> - divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context <br> - identify common factors, common multiples and prime numbers <br> - Solve problems involving addition, subtraction, multiplication and division <br> Additional: <br> - identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. <br> - know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers <br> - establish whether a number up to 100 is prime and recall prime numbers up to 100 <br> - recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) <br> - multiply and divide whole numbers and those involving decimals by 10,100 and 1000 |
|  | Addition ${ }^{\text {a }}$ Subtraction | Multiplication ${ }^{\text {a }}$ Division |

Use place value to add numbers mentally

Partition to add numbers mentally

Partitioning to add numbers mentally to bridge 10 .

Column method for addition including decimal and larger numbers.

Use rounding to estimate addition calculations

Understand the position of addition in BODMAS.

Solve multi-step problems in context involving addition, subtraction, multiplication and division

Using place value to mentally subtract

Partitioning to subtract numbers mentally

Bridging a 10 mentally.
Counting on a number line to count up to multiplies of $1000+$ or money
(eg. Change from $£^{20.00}$ )
Column method for addition including decimal (different number of decimal places) and larger numbers.

Use rounding to estimate subtraction questions

Recognise subtraction questions as difference and take away and represent appropriately.

Understand the position of subtraction in BODMAS.

Solve multi-step problems in context involving addition, subtraction, multiplication and division

Recall times table facts up to $12 \times 12$ in any order including fact families

Using known facts to answer questions such as ( $30 \times 70$ or $0.3 \times$ 7) mentally

Use the partitioning method to support recalling facts for long division.

Short multiplication method for multiplying larger numbers and decimal numbers by a single digit.

Long multiplication to multiply up to 4 digits by 2 digits

Recognise multiplication questions as scaling, groups and groups of and represent in a bar model

Recognise square numbers by arrays and the notation.

Use cubes to model
understanding of cubed numbers
Understand the position of multiplication in BODMAS.

Solve multi-step problems in context involving addition,

Recall division facts based on times table knowledge

Using known facts to answer questions such as $(4200 \div 6)$ mentally

Short division method for dividing by single digits to be taught first in year 6 .

Long division method for dividing two digit numbers

Divide representing a remainder as a remainder, a decimal or fraction.

Recognise division questions as groups and groups of and represent both ideas in a bar model

Understand the position of division in BODMAS.

Solve multi-step problems in context involving addition, subtraction, multiplication and division

|  |  |  | subtraction, multiplication and division |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Put <br> Together <br> Add <br> Altogether <br> Total <br> Sum | Take away <br> Minus <br> Subtract <br> Distance between <br> Difference between <br> More than and less than Difference | Multiply Times Groups of Lots of Equal groups Array | Divide Share <br> Equal parts Equal groups Each have... Array |

