Year 5 Autumn maths

## Prior Learning

## Learning in year 4

Place value - represent and partition numbers to 10,000
Addition \& Subtraction - add and subtract up to 2 four digit numbers with more than one exchange.
Multiplication \& Division -multiply and divide tables facts to $x 12$. Multiply 3 digits by a single digit.
Fractions-partition, compare and order Mixed numbers. Understand improper fractions, convert improper fractions to Mixed numbers.

## Key vocabulary for this unit

## Place Value

Millions
Thousands
Hundreds
Tens
Ones
Zero
Place value
Greater than
Less than
Order
Round
Rounded
Negative number
Partition
Interval
Sequence

| Addition \& Subtraction | Multiplication and Division |
| :--- | :--- |
| Add | Multiply |
| Total | Groups of |
| Make | Lots of |
| Plus | Times |
| Sum | Divide |
| More | Share |
| Altogether | Remainder |
| Difference | Factor |
| Subtract | Multiple |
| Less | product |
| Minus |  |
| Take away |  |
| Column addition |  |
| Column subtraction |  |
| Estimate |  |
| Inverse operation |  |

Fractions
Numerator
Denominator
Unit fraction
Non-unit fraction
Equivalent
Whole
Mixed number Improper fraction
Simplest form
Multiple
Common denominator
Common numerator

| Linear sequence | Number facts Place value Complex |  |
| :---: | :---: | :---: |
| Learning Sequence |  |  |
| Place Value | - read, write, order and compare numbers up to 100,000 and determine the value of each digit <br> - read, write, partition and make numbers to 1,000,000-order and compare numbers up to 1,000,000 <br> - Count forwards or backwards in steps of powers of 10 for any given number up to 1000 000. <br> - Round any number up to 1000000 to the nearest $10,100,1000,10000$ and 100000. <br> - Read Roman numerals to $1000(\mathrm{M})$ and recognise years written in Roman numerals. |  |
| Addition \& Subtraction | - Add and subtract whole numbers with more than 4 digits, including using formal written methods. <br> - Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. <br> - Use the inverse operations to check answers to calculations. <br> - Add and subtract numbers mentally with increasingly large numbers. |  |
| Multiplication and Division | - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. <br> - Establish whether a number up to 100 is prime and recall prime numbers up to 19. <br> - Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. <br> - Recognise and use square numbers and cube numbers, and the notation for squared and cubed. <br> - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. |  |



- use the formal method of short division to divide numbers up to four digits by a one-digit number.
- multiply and divide whole numbers and those involving decimals by 10,100 and 1000


## Fractions

- compare and order fractions using multiplication and division to find equivalent fractions.
- convert between improper fractions and mixed numbers;
- add and subtract fractions with the same and also different denominators;
- nterpret remainders as whole numbers, decimals and simple fractions and begin to choose the best way to express remainders, depending on the context of the problem;


## Fractions

- answer reasoning and problem solving questions to demonstrate understanding
- solve a range of multiplication and division problems, applying their mental and written methods

