Number and Place Value

Lesson sequence

Roman numerals
Reading and writing numbers up to 1,000,000
Powers of 10
Finding 10, 100, 1000, 10,000, 100,000 more or less
Partitioning numbers to 1,000,000
Comparing and ordering numbers to 1,000,000
Rounding numbers within 1,000,000

Vocabulary revision

- *Represents*
- *Part*
- *Partition*
- *Thousands*
- *Approximate*
- *Approximately*
- *Thousands*
- *Ten of thousands*
- *Integer*
- *Positive*
- *Negative*
- *Above/below zero*
- *Decimal*
- *Decimal point*
- *Decimal place*

Sticky learning

New Knowledge

- *To know the roman numerals up to M*
- *To know place value up to 1,000,000*
- *To know that if a digit is 0-4, you round the number down and a digit is 5-9, you round it up*
- *To round decimals with two decimal places to the nearest whole number and to one decimal place*
- *To solve number problems and practical problems that involve all of the above*

New Skills

- *To interpret negative numbers in context,*
- *To count forwards and backwards with positive and negative whole numbers, including through zero*
- *To count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000*
- *To read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit*
- *To read Roman numerals to 1000 (M) and recognise years written in Roman numerals.*
- *To round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000*

New vocabulary I will learn

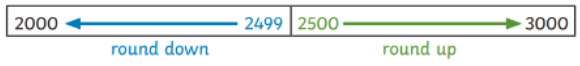
- Hundreds of thousands
- Millions
- Thousandths
- Linear sequence
- Powers of 10

Pictorial representations

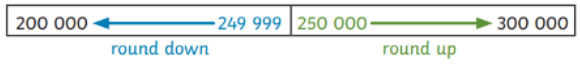
Millions	Hundreds of thousands	Tens of thousands	Thousands	Hundreds	Tens	Ones	1/10	1/100	1/1000

Rounding to the nearest 10

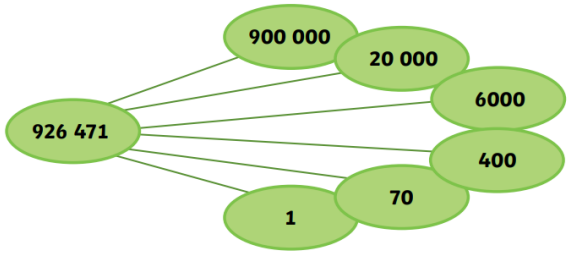
Rounding to the nearest 1000



Rounding to the nearest 100 000



Power	Expression	Standard Form
10^1	10	10
10^2	10 x 10	100
10^3	10 x 10 x 10	1,000
10^4	10 x 10 x 10 x 10	10,000
10^5	10 x 10 x 10 x 10 x 10	100,000
10^6	10 x 10 x 10 x 10 x 10 x 10	1,000,000
10^7	10 x 10 x 10 x 10 x 10 x 10 x 10	10,000,000
10^8	10 x 10 x 10 x 10 x 10 x 10 x 10 x 10	100,000,000
10^9	10 x 10 x 10 x 10 x 10 x 10 x 10 x 10 x 10	1,000,000,000



Concept Links/Prior Knowledge

- *To know that hundredths arise when dividing an object by one hundred and dividing tenths by ten*
- *To know the roman numerals L=50 and C=100*
- *To know that over time, the numeral system changed to include the concept of zero and place value.*
- *To know that negative numbers are numbers that are less than zero.*
- *To know the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)*
- *To count backwards through zero to include negative numbers*
- *To count in multiples of 6, 7, 9, 25 and 1000*
- *To find 1000 more or less than a given number*
- *To order and compare numbers beyond 1000*
- *To compare numbers with the same number of decimal places up to two decimal places*
- *To identify, represent and estimate numbers using different representations*
- *To read Roman numerals to 100 (I to C)*
- *To round any number to the nearest 10, 100 or 1 000*
- *To solve number and practical problems that involve all of the above and with increasingly large positive numbers.*