

# Number and Place Value

## Lesson sequence

Reading and writing numbers to 10,000,000

Powers of 10

Comparing and ordering integers

Rounding any integer

Negative numbers

## Vocabulary revision

- Represents
- Part
- Partition
- Thousands
- Approximate
- Approximately
- Thousands
- Ten of thousands
- Integer
- Positive
- Negative
- Above/below zero
- Decimal
- Decimal point
- Decimal place
- Hundreds of thousands
- Millions
- Thousandths
- Linear sequence
- Powers of 10

## Sticky learning

### New Knowledge

- To know place value up to 10,000,000
- To know that orders show how many times a number or letter has been multiplied by itself

### New Skills

- To use negative numbers in context, and calculate intervals across zero
- To read, write, order and compare numbers up to 10 000000 and determine the value of each digit
- To identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places To round any whole number to a required degree of accuracy
- To solve problems which require answers to be rounded to specified degrees of accuracy
- To solve number and practical problems that involve all of the above

## New vocabulary I will learn

- Tens of millions

## Pictorial representations

Tens of millions	Millions	Hundreds of thousands	Tens of thousands	Thousands	Hundreds	Tens	Ones	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

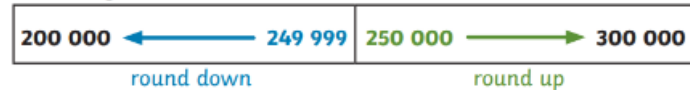
Rounding to the nearest 1000



Rounding to the nearest 10 000



Rounding to the nearest 100 000



Rounding to the nearest 1 000 000



3 926 471
3 926 000      471



## Concept Links/Prior 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
- 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