## Number and Place Value

is

## Lesson sequence

Partitioning and representing numbers to 10,000
Finding $1,10,100,1000$ more or less
Comparing and ordering numbers to 10,000
Roman numerals
Round to the nearest 10
Round to the nearest 100
Round to the nearest 1000

## Sticky learning

## New 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)


## New Skills

- 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 1000
- To solve number and practical problems that involve all of the above and with increasingly large positive numbers


## Vocabulary revision

- Hundreds
- Zero
- Digit
- Multiple
- Less than
- Least
- Most
- Fewer
- One-, two- or three-digit number
- Represents
- Place value
- Part
- Partition
- Thousands
- Approximate
- Approximately
- Nearest
- Nearest ten
- Roman numeral


## New vocabulary I will learn

- Thousands
- Ten of thousands
- Hundredths
- One-, two-, three- or four-digit number
- Integer
- Positive
- Negative
- Above/below zero
- Decimal
- Decimal point


## Pictorial representations

| Tens of <br> thousands | Thousands | Hundreds | Tens | Ones | $\frac{1}{10}$ | $\frac{1}{100}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |


| Counting in 6 s |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| Counting in 7s |  |  |  |  |  |  |  |  |  |  |
| 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| Counting in 9 s |  |  |  |  |  |  |  |  |  |  |
| 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| Counting in 25 s |  |  |  |  |  |  |  |  |  |  |
| 0 | 25 | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 225 | 250 |
| Counting in 1000s |  |  |  |  |  |  |  |  |  |  |
| 0 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 |


| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Rounding to the nearest 100 |  |  |  |
| :---: | :---: | :---: | :---: |
| 200 | 249 | 250 | 300 |
| Rounding to the nearest 1000 up    <br> 2000 2499 2500 3000 |  |  |  |

Negative numbers
Positive numbers


## Concept Links/Prior Knowledge

- To know all the numbers up to 1000
- To know the place value of each digit in a threedigit number (hundreds, tens, ones)
- To know that tenths arise from dividing an object into 10 equal parts and in dividing one digit numbers or quantities by 10.
- To know the roman numerals $I=1, V=5$ and $X=10$
- To count from 0 in multiples of $4,8,50$ and 100
- To find 10 or 100 more or less than a given number
- To compare and order numbers up to 1000
- To identify, represent and estimate numbers using different representations
- To read and write numbers up to 1000 in numerals and in words
- To solve number problems and practical problems

