

## Just-in-Time Vignettes



Curriculum intent


A rich balance


NZ Maths - a great place to start


Place Value - read, write and order


Place Value - expand and nest


Place Value- mental computation
Place Value - rename and round

Rapid Routines

Assessment


## Scope and sequence to Level 4

| Ivumper Knowreage |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 |  | Level 2 |  | Level 3 |  | - Covel 4 |
|  | After 1 year | After 2 years | After 3 years | After 4 years | After 5 years | After 6 years | After 7 years Alto erears |
| amber Range ft least to | 20 | 100s | 1000s | 10 000s | 100 000s \& 0.1 | 1000000 \& 0.01 | >1 000000 and $<0.01$ |
| Repres \& write numbers and record | Seventeen (17) | One hundred and twenty-five (125) | Two thousand and twenty-five (2025) | Twenty thousand, four hundred \& five $(20,405)$ | 3 and 4 tenths (3.4) | Ten and fifteen hundredths (10.15) | millions and billions thousandths, milliont |
| Order \& compare Numbers in the range .. |  | $\bigcirc{ }^{-100}$ | 0-1,000 | 0-100,000 | 0-1,000,000 |  | tenths, hundredths and thousandths |
| Round <br> Round numbers to the nearest |  | ten | hundred | thousand | million | tenths \& hundredths | tenths, hundredths and thousandths |
| Name \& Expand <br> Name, model and expand | $\begin{gathered} 17 \\ 10+7 \end{gathered}$ | 125 $100+20+5$ 1 hundred, 2 tens and 5 ones | $\begin{gathered} \mathbf{2 , 0 2 5} \\ 2,000+20+5 \end{gathered}$ <br> 5 means 5 ones | $\mathbf{2 0 , 4 0 5}$ $20,000+400+5$ 4 means 4 hundreds | $175 \mathbf{5 2 5}$ $100,000+70$, $000+5,000+500+20+5$ 2 means 2 tens | $\mathbf{1 2 . 5}$ $10+2+0.5$ 1 ten, 2 ones, 5 tenths 1 means 1 ten | $\begin{aligned} & 8753=8 \times 10^{3}+7 \times 10^{2}+5 \times 10^{1}+3 \\ & \times 10^{0} \\ & 2.45=2 \times 10^{0}+4 \times 10^{-1}+5 \times 10^{-2} \end{aligned}$ |
| Nesting <br> Number can have different names without changing the value. (includes unitising and re-unitising - 30 ones is 3 tens) | $\begin{gathered} 17 \\ 1 \text { ten, } 7 \text { ones } \end{gathered}$ | 125 <br> 12 hundreds and 5 ones 100 is 10 tens | 656 <br> 65 tens and 6 ones 1,000 is 10 hundreds or 1 thousand | 20,405 20 thousands and 405 ones or 10,000 is 100 hundreds or 10 thousands | 175,525 <br> 17 tens thousands, 50 hundreds, 2 tens, 5 ones 100,000 is 1,000 hundreds or 100 thousands | 12.5 <br> 1 ten and 25 tenths <br> 1.00 is 10 tenths, 100 hundredths | 2.47 <br> 2 whole and 47 hundredths <br> 10000000 is 10000 thousands |
| Renaming <br> Numbers can be rearranged in terms of place value without changing the value |  | $\mathbf{1 2 5}$ is 11 tens and 15 ones | 3250 is <br> 30 hundreds and 250 ones | 12505 is <br> 11 ten thousands and 1505 ones | 125475 is <br> 124 thousands and 1475 ones | 1.2 is <br> 11 tenths and 10 hundredths | 10.75 is <br> 107 tenths and 5 hundredths or 1 ten and 75 hundredths |

Maths - Ideas and insights TLF

## Connecting Numbers with Numerals



Self-Understanding

## Read and write

| MILLIONS |  |  | THOUSANDS |  |  | ONES |  |  | PARTS OF <br> ONE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | T | 0 | H | T | 0 | $H$ | T | 0 | T |  |
|  | 8 | 3 | 5 | 1 | 0 | 5 | 8 | 5 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

Read digits in the millions house and say eighty three million"
Read digits in the thousands house and say "five hundred and ten thousand"
Read digits in the ones house and say "five hundred and eighty five"

## Rapid routines - Dealing Decimals

$$
4 \cdot 916
$$

$$
040, \quad \begin{gathered}
2, \\
59
\end{gathered} \frac{0^{2}}{4}
$$

| Thousands |  |  | Ones |  |  |  | Parts of <br> One |  |  | Hundredths |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thousandths |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

$$
\begin{aligned}
& 10 \% \\
& \text { 4. } 953 \\
& 0.003 \\
& 0.05 \\
& 0.9 \\
& 4 .
\end{aligned}
$$

## Rapid Routines- Ordering Decimals



1. Roll a dice labeled $1,2,3$ to determine how many dice you will roll on your turn (1, 2, or 3 )
2. Roll your allocated amount of dice (1, 2 or 3 )
3. Arrange your dice to make a 1,2 , or 3 decimal number
4. Record this decimal on your rocket
5. Read your decimal aloud to your partner

The goal of the game is to fill your rocket first with decimals in order.

