$462 \div 3=$

| $\div$ |  |
| :--- | :--- |
| 3 | 462 |

## Step 1:

Write out the sum using the short division method
$462 \div 3=$


Step 2:
Ask the question
'Does '3' like '4? ?

No, '3' doesn't like '4.'
The nearest multiple of $\mathbf{3}$ it likes is $\mathbf{3}$. Replace with $\mathbf{3}$
$462 \div 3=$

| $\div$ |  |
| :--- | :--- |
| 3 | $3 / 4^{1} 62$ |

## Step 3:

The difference between 4 and $\mathbf{3}$ is $\mathbf{1}$. Place this next to the 6 .

\section*{$462 \div 3=$} | $\div$ |  |
| :--- | :--- |
| 3 | $34^{15} 62$ |

## Step 4:

Ask the question ‘Does ‘ 3 ’ like ‘ 16 ’?’

No, '3' doesn't like '16.' The nearest multiple of $\mathbf{3}$ it likes is $\mathbf{1 5}$. Replace with 15

## $462 \div 3=$

| $\div$ |  |
| :--- | :--- |
| 3 | $3 / 462$ |

## Step 5:

The difference between 16 and 15 is 1 . Place this next to the 2 .

Ask the question 'Does ' 3 ' like ' 12 '? Yes, it does as it's a multiple of 3.

$$
\begin{aligned}
& 462 \div 3=\quad 462 \div 3=\quad 462 \div 3= \\
& \begin{array}{l|l}
\div & 1 \\
\hline 3{ }^{3} 4^{15} 62
\end{array} \\
& \begin{array}{c|c}
\div & 15 \\
\hline 3 & 34^{15} 2
\end{array} \\
& 462 \div 3= \\
& \begin{array}{r|r}
\div & 154 \\
\hline 3 & \begin{array}{l}
34^{1 / 4} 6
\end{array}
\end{array}
\end{aligned}
$$

## Step 6:

3 goes into 3 ... 1 time
3 goes into 15 ... 5 times
3 goes into 12 ... 4 times

