WALT: To be able to use written method to divide a 3-digit number by a single digit number (hundreds > divisor, one exchange) with no remainder

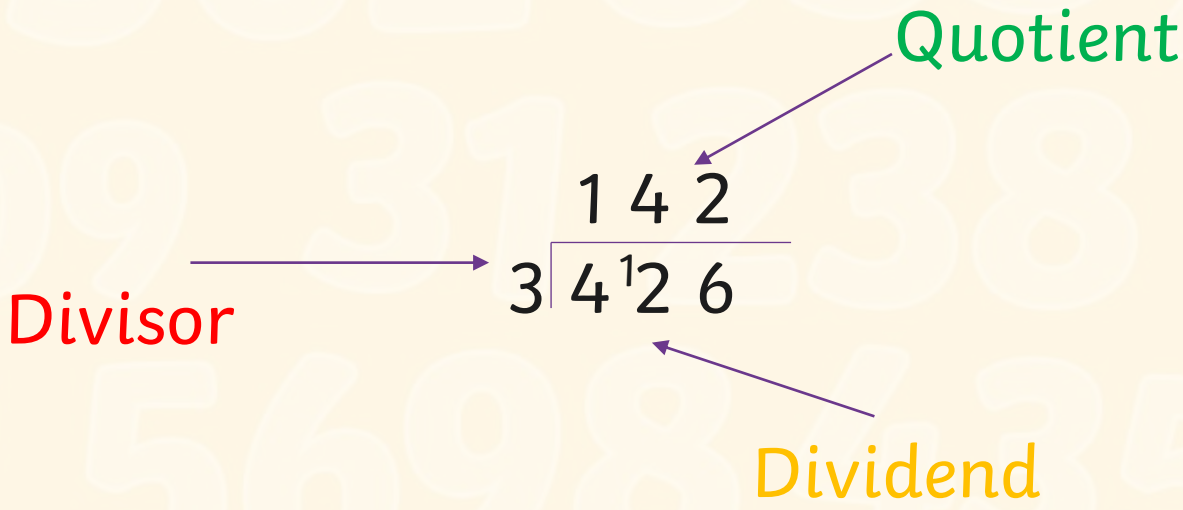
Vocabulary

3 digit
Single digit
Divisor
Divide
remainder
Times tables
Digits

Do it

What is a dividend?
What is a divisor?
Quotient?

The number that is divided is called the dividend and the number which the dividend is being divided by is the divisor. The answer to a division problem is the quotient.



Do it: practice

Example of what we are covering today:

$$
\begin{array}{r}
161 \\
5\overline{)8^{3}05} \\
\end{array}
$$

Do it: Your turn

$3\overline{)648}$

$3\overline{)816}$

Calculate:

$3\overline{)426}$

$3\overline{)726}$

$5\overline{)705}$

$928 \div 4 =$

$\square = 786 \div 6$

Do it: Answers

$$
\begin{array}{r}
216 \\
3\overline{)6\,4\,{}^{1}8}
\end{array}
$$

$$
\begin{array}{r}
272 \\
3\overline{)8\,{}^{2}1\,6}
\end{array}
$$

Do it: Variation

$928 \div 4 =$

$4\overline{)928}$

$\square = 786 \div 6$

$6\overline{)786}$

Secure it

Coco thinks that:

$$\begin{array}{r} 101 \\ 3\overline{)703} \end{array}$$

Explain why she is incorrect.

Use the word ‘because’ when explaining your answer.

Hint: just a sentence stem for the answer. No example needed.

Secure it

Coco is incorrect because you can not divide 703 by 3. The answer would leave remainders.

Deepen it

Quotient: means answer
Answer needs to be 219.

Hint start by multiplying 219 by a small number. The answer you get can then be written in a division calculation and the divisor will be the number you originally multiplied by.

Divisor = the number on left you are dividing by.

Dividend: the 3 digit number that is being divided.

A 3-digit number is divided by a 1-digit number.
The quotient is 219.

Investigate the maximum and minimum values for the divisor and dividend.

Investigate the maximum value for the quotient when the hundreds digit of the dividend
i) > divisor
ii) = multiple of the divisor

Deepen it

Find the largest answer you can get when

Firstly the hundred digit (in the dividend: the 3 digit number) is larger than the divisor (the 1-digit number you are dividing by.

Then write another calculation where the hundreds digit in the dividend (the 3 digit number) is a number that is a multiple of the divisor (the number you are dividing by)

For example if your divisor is 3 then the hundred digit in the 3 digit dividend would be 3,6 or 9 as they can all be divided by 3.