

Tuesday

Division

To use short division to divide 3-digit numbers

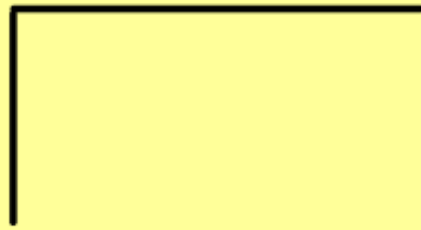
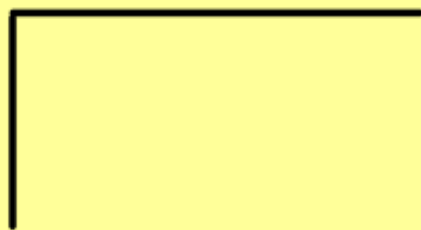
Short division is also known as the '**bus stop**' method.

When would you need a written method for division?

$$78 \div 3 =$$

$$68 \div 4 =$$

$$96 \div 6 =$$



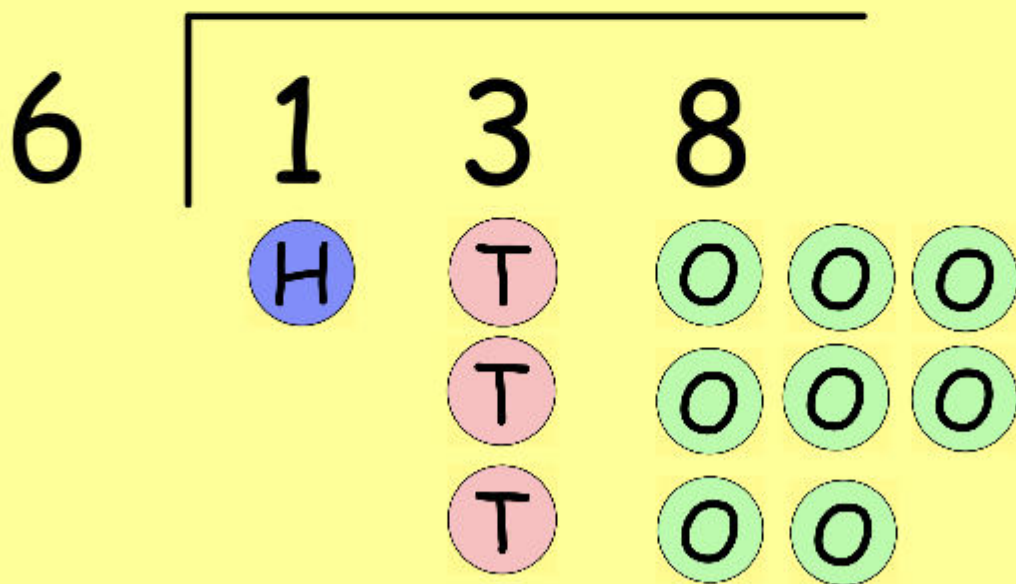
To use short division to divide 3-digit numbers

$$138 \div 6 =$$

H

T

O




To use short division to divide 3-digit numbers

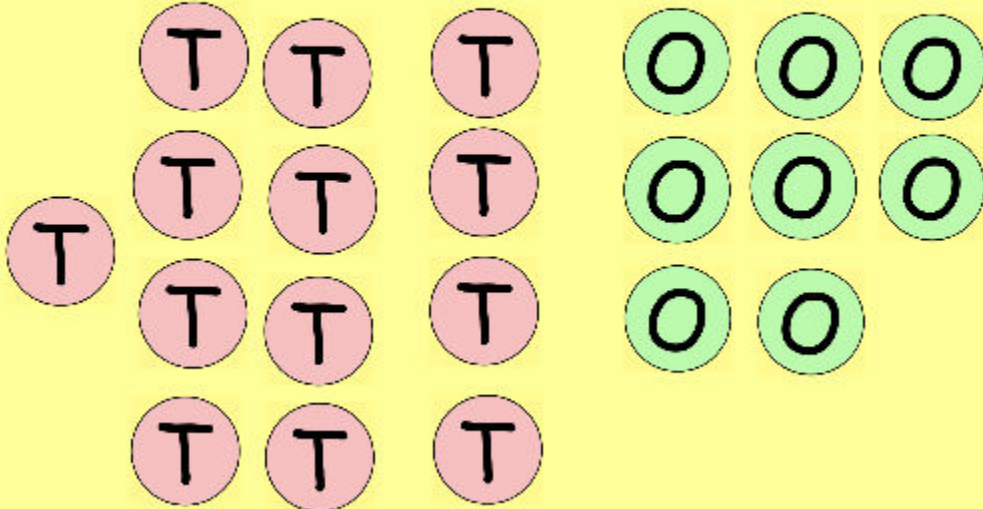
$$138 \div 6 =$$

H T O

0

6 $\overline{) 1^1 3 8}$

exchanged 



To use short division to divide 3-digit numbers

$$138 \div 6 =$$

H T O

0 2

6 ~~1~~ ¹~~3~~ ¹8

exchanged ~~⊗~~ exchanged ~~⊗~~

T	T	T	O	O	O			
T	T	T	O	O	O	O	O	
T	T	T	O	O	O	O	O	O
T	T	T	O	O	O	O	O	O

The diagram illustrates the short division of 138 by 6. The divisor 6 is on the left. The dividend 138 is written under a horizontal line, with the digits 1, 3, and 8 each having a small '1' above it. The digits 1 and 3 are crossed out with red slashes. A blue box encloses the first three 'T' tokens (representing 138) in the first two rows. A green box encloses the first three 'O' tokens (representing 6) in the first row. The remaining 'O' tokens are arranged in a 3x2 grid. Two 'exchanged' labels with crossed-out circles are present: one on the left and one on the right.

To use short division to divide 3-digit numbers

$$138 \div 6 =$$

H T O
0 2 3

6 ~~1~~ ¹~~3~~ ¹8

exchanged ~~⊗~~ exchanged ~~⊗~~

The diagram illustrates the number 138 using base ten blocks. The hundreds place is represented by one pink block with the letter 'T'. The tens place is represented by three pink blocks with the letter 'T'. The ones place is represented by three green blocks with the letter 'O'. A blue box groups the hundreds and tens blocks together. Another blue box groups the tens and ones blocks together. A third blue box groups the ones block. Two 'exchanged' labels with crossed-out circles are present: one on the left and one on the right.

To use short division to divide 3-digit numbers

$$656 \div 4 =$$

H

T

O

$$4 \overline{) 656}$$

T

O

To use short division to divide 3-digit numbers

$$245 \div 7 =$$

H T O

$$7 \overline{) 245}$$

T

O

To use short division to divide 3-digit numbers

Jamie is using short division to divide 3-digit numbers.

He has done these calculations but he isn't sure if they are right. You need to check them for him.

You will need to **fully explain any mistakes** you find so Jamie can know what he will need to do next time.

	H	T	O
	1		1
5	505		

$$505 \div 5 = 11$$