

# Explanation

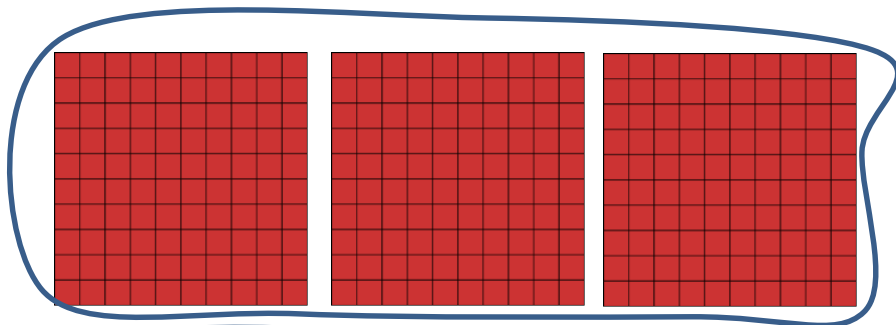
- Today we are going to learn a method of division called
- short division (sometimes nicknamed the ‘bus shelter’ or
- ‘bus stop’ method – can you see why?).

- $678 \div 3$

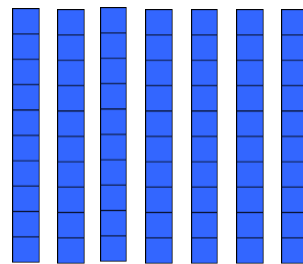
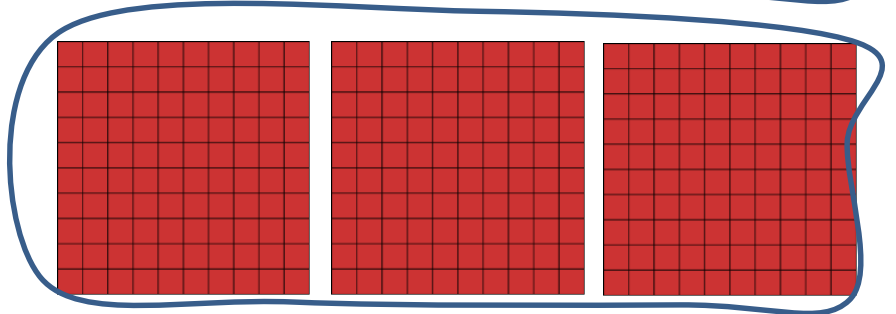
$$3 \overline{) 678}$$

- We’re going to make the 678 using base-10 equipment,
- and look for groups of 3 blocks (because we’re dividing by 3).

# Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.



We are going to look for *groups of three* 100 blocks, then *groups of three* 10 blocks and so on.



600

70

8

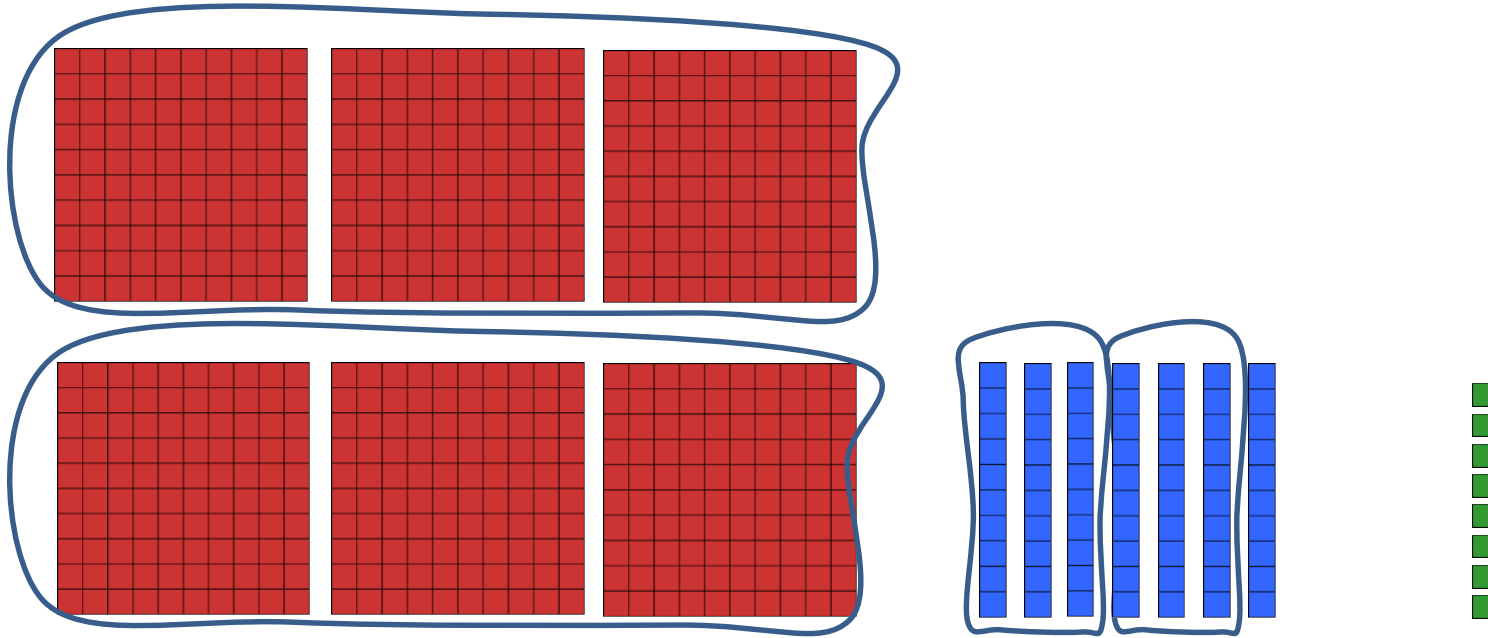
? How many groups of three 100 'blocks'?

We write 2 in the 100s column as we are dividing the 100s.

$$\begin{array}{r} 2 \\ 3 \overline{) 600} \end{array}$$



# Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.



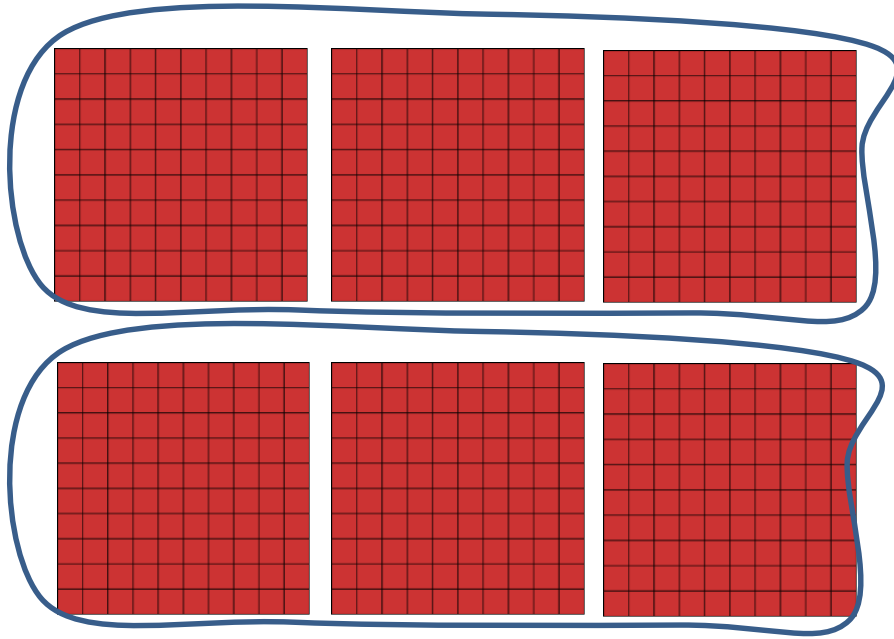
How many groups of 3 'sticks'?

We're dividing the 10s so we write the 2 in the 10s column and write the 1 ten that we have left over in front of the 1s.

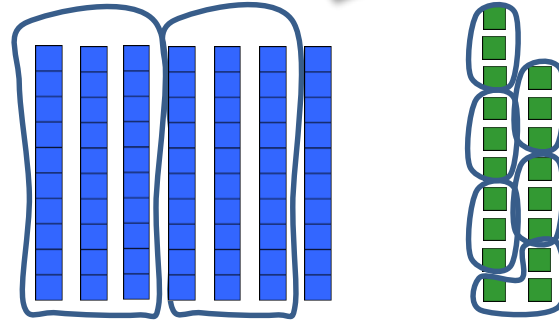
$$\begin{array}{r} 22 \\ 3 \overline{) 67} \end{array}$$



# Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.



We exchange the one 'stick' of 10 for 10 ones.



? How many 3s in 18?

$$\begin{array}{r} 226 \\ 3 \overline{) 678} \end{array}$$

We write 6 in the 1s column.  
So the answer is 226.

Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.

$$678 \div 3$$

Let's check using the vertical layout of chunking.  
Think of the division as a 'multiplication with a hole'.

$$\square \times 3 = 678$$

*How many 3s are in 678?*

$$200 \times 3 = \underline{600}$$

*200 x 3 = 600. How much left?*

$$78$$

*How many 3s are in 78?*

$$20 \times 3 = \underline{60}$$

*20 x 3 = 60. How much left?*

$$18$$

*How many 3s are in 18?*

$$6 \times 3 = \underline{18}$$

*6 x 3 = 18. How much left?*

$$0$$

$$678 \div 3 = 226$$

We get the same answer!

## Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.

1, and 2 left over.  
We write 1 in the 100s column as we are dividing the 100s, then 2 tens in front of the 10s digit.

We are going to move a sticky note along to hide and reveal each column in turn.

$$\begin{array}{r} 1 \\ 3 \overline{) 52} \end{array}$$

? How many 3s in 5?

? How many 3s in 24?

## Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.

8. We write 8 in the 10s column as we are dividing the 10s.

$$\begin{array}{r} 18 \\ 3 \overline{) 524} \end{array}$$

? How many 3s in 6?

Day 1: Use short division to divide 3-digit numbers by 1-digit numbers.

2. We write 2 in the 1s column.

$$\begin{array}{r} 182 \\ 3 \overline{) 546} \end{array}$$

The answer is **182**.



## Pre Skills Day | Monday 11<sup>th</sup> January

### Division Pre-skills

(3)

1.  $18 \div 3 =$

2.  $21 \div 3 =$

3.  $16 \div 4 =$

4.  $24 \div 4 =$

5.  $24 \div 8 =$

6.  $48 \div 8 =$

(4) Use the bus stop method to calculate:

7.  $369 \div 7 =$

8.  $248 \div 2 =$

9.  $\underline{115} \div 6 =$

10.  $205 \div 5 =$

11.  $400 \div 7 =$

12.  $672 \div 6 =$

13.  $\underline{402} \div 3 =$

14.  $568 \div 8 =$

15.  $891 \div 9 =$

16.  $673 \div 6 =$