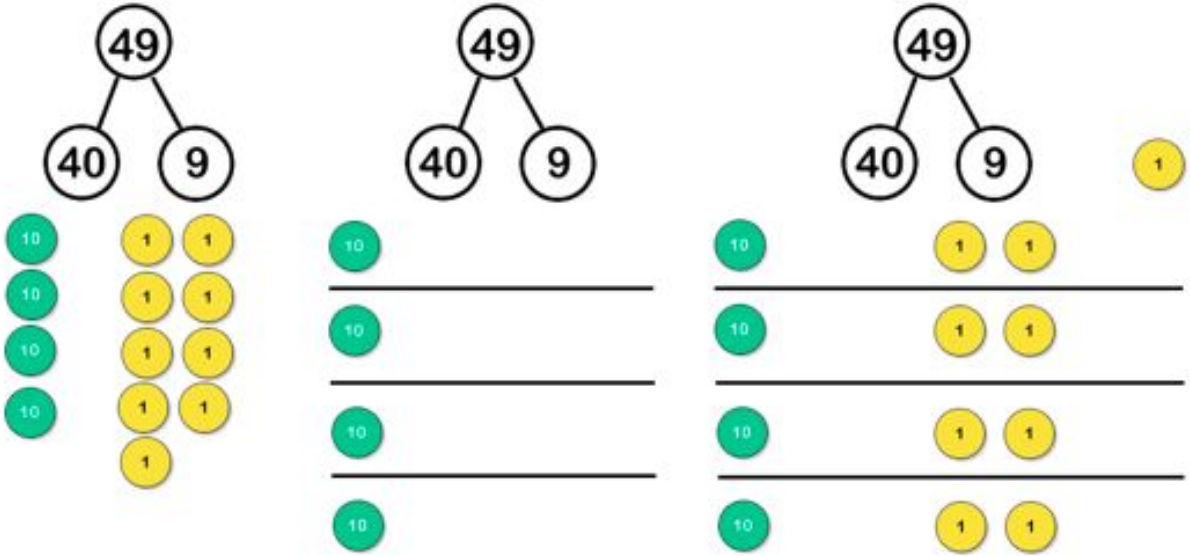
To be able to divide two-digit numbers by single digits

Talking Time:

Describe the method Dale uses to find the answer to 49 ÷ 4.



To be able to divide two-digit numbers by single digits

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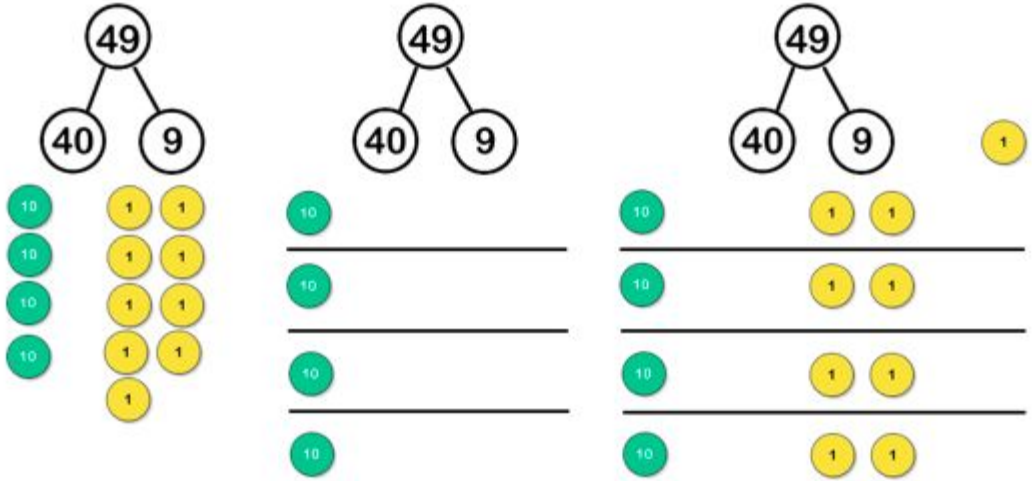
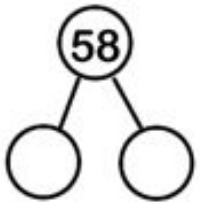


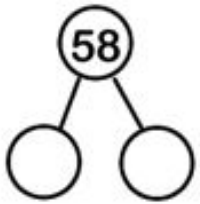
First, Dale partitions 86 into 80 and 6 and then models both parts using place-value counters.
He then divides the tens by 4 (40 ÷ 4 = 10) and divides the ones by 4.
He has 1 one remaining at the end, so his answer is 12 remainder 1.

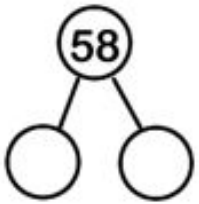
To be able to divide two-digit numbers by single digits

Talking Time:

Use this method to find the answer to 58 ÷ 5.



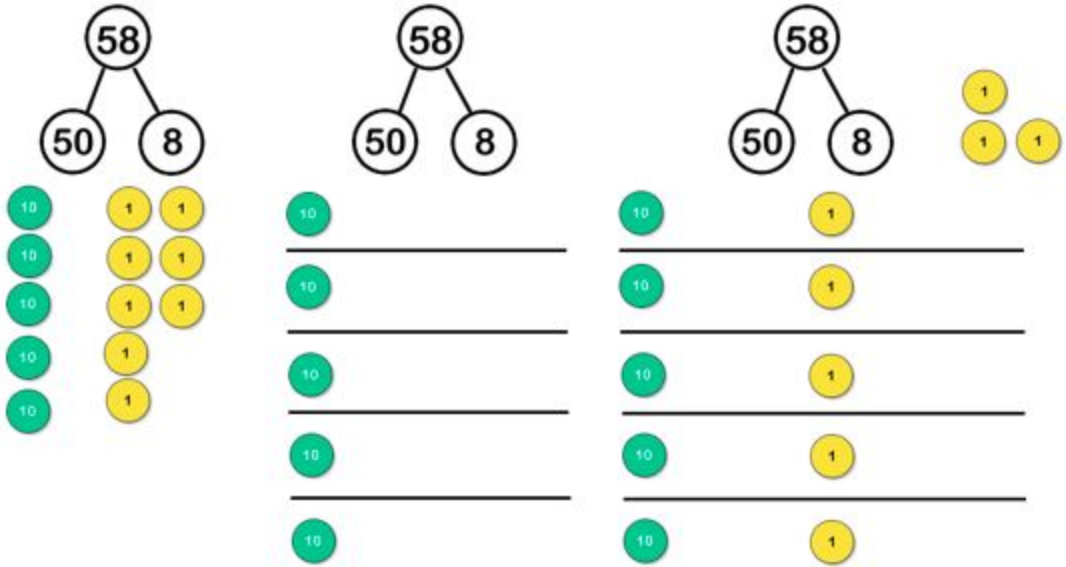




To be able to divide two-digit numbers by single digits

Talking Time:

Use this method to find the answer to 58 ÷ 5.



So, 58 ÷ 5 = 11 remainder 3

To be able to divide two-digit numbers by single digits

Activity 1:

Use place-value counters and partitioning to find the answer to 87 ÷ 4.

To be able to divide two-digit numbers by single digits

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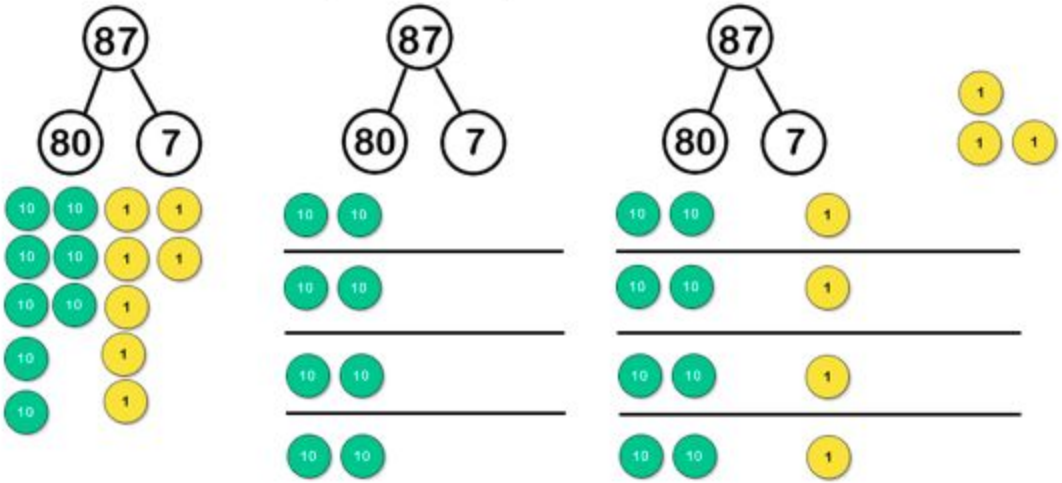
Use place-value counters and partitioning to find the answer to 87 ÷ 4.

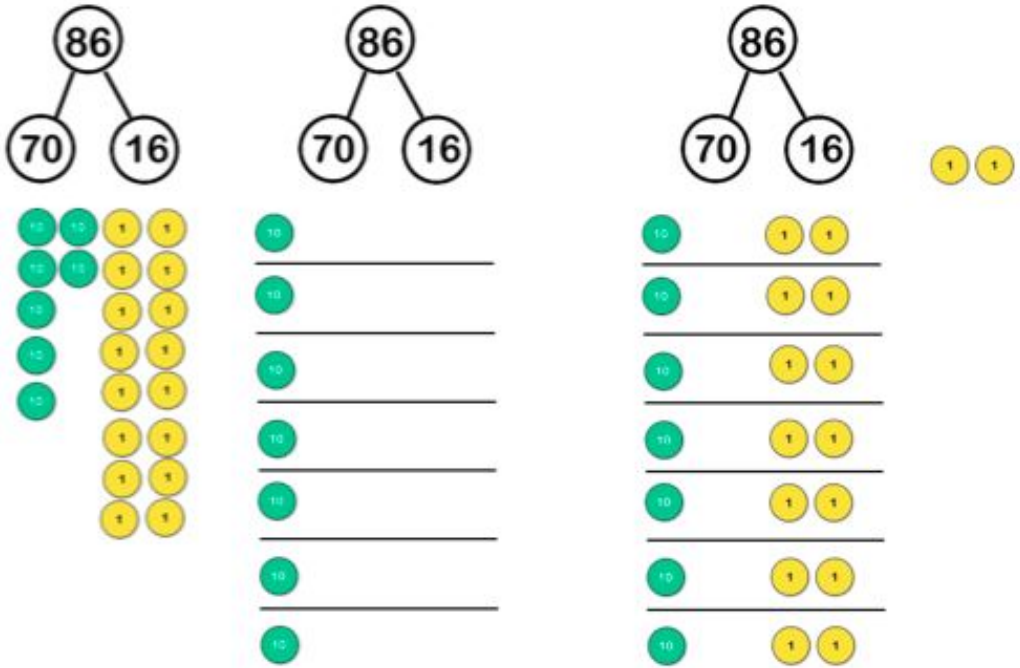


So, 87 ÷ 4 = 21 remainder 3

To be able to divide two-digit numbers by single digits

Talking Time:

Describe the method Ella uses to find the answer to 56 ÷ 4.



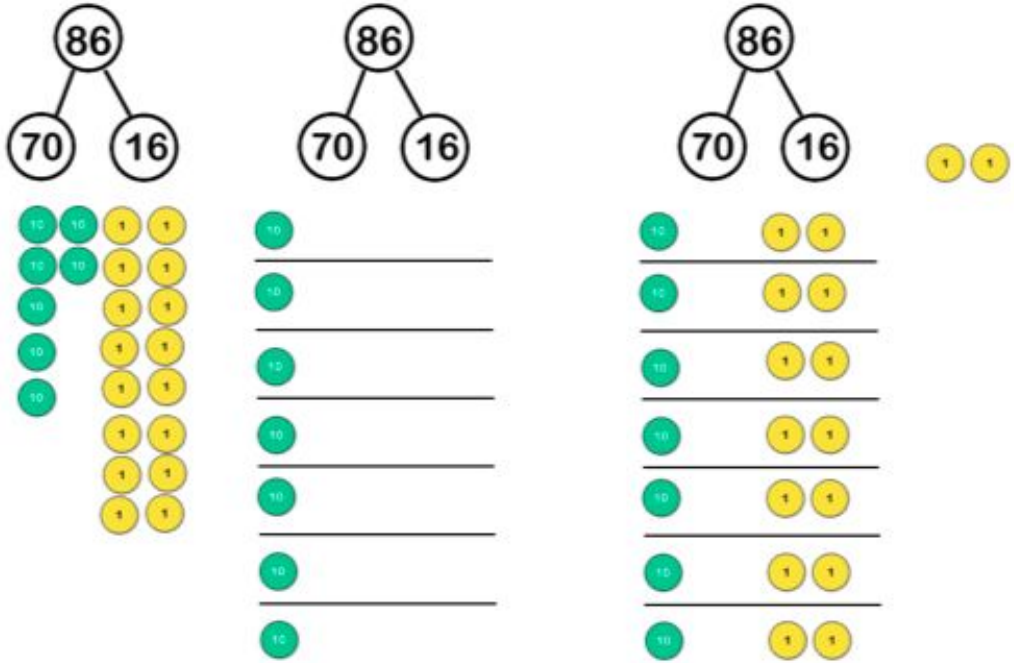
To be able to divide two-digit numbers by single digits

Talking Time:

Describe the method Ella uses to find the answer to 56 ÷ 4.

First, Ella partitions 86.

She exchanges so that the number becomes 70 and 16.
She models the partitioned number using place-value counters.
Then she divides the tens by 7 and the ones by 7.
She has 2 left over and finds that 86 ÷ 7 = 12 remainder 2.

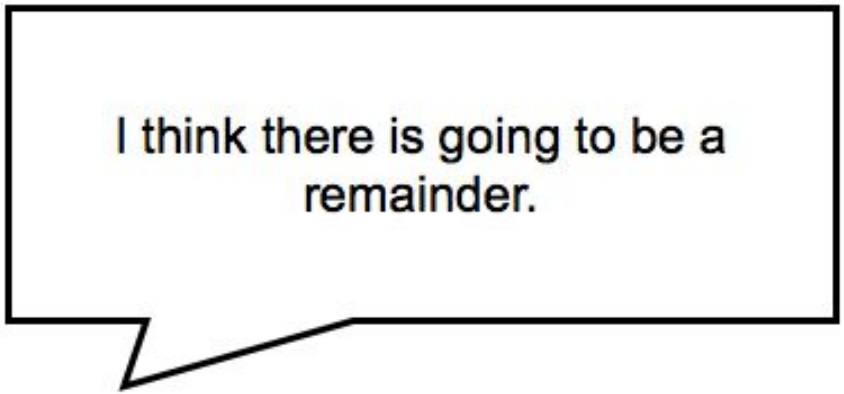


To be able to divide two-digit numbers by single digits

Talking Time:

Charlotte wants to divide 79 by 6.

She says,



How does Charlotte know this before she has started?

To be able to divide two-digit numbers by single digits

Talking Time:

Charlotte wants to divide 79 by 6.

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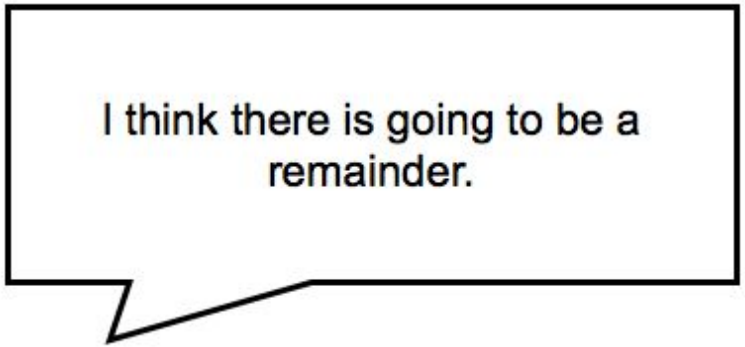


How does Charlotte know this before she has started?

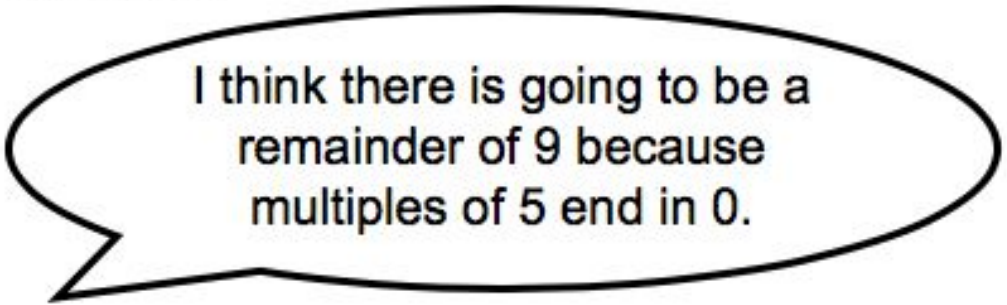
Charlotte may know this because she knows that all multiples of 6 are even. 79 is an odd number, so there will be a remainder.

Charlotte may also have partitioned 79 into 60 and 19 and she can see that – although 60 divides into 6 easily – the number 19 does not and so there will be a remainder.

To be able to divide two-digit numbers by single digits

Activity 2:

Sam wants to divide 69 by 5.
He says,

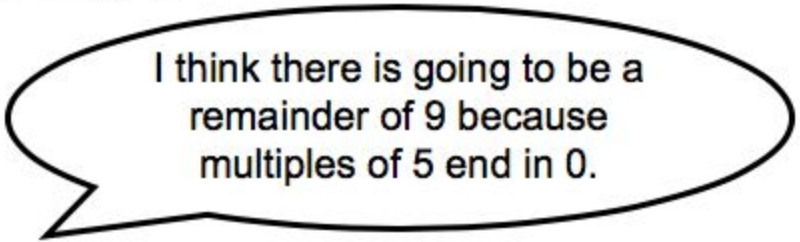


Is Sam correct? Explain your answer to a friend.

To be able to divide two-digit numbers by single digits

Activity 2:

Sam wants to divide 69 by 5.
He says,



Is Sam correct? Explain your answer to a friend.

No. Sam is not correct.
Multiples of 5 also end in 5s and the last multiple of 5 before 69 ends in a 5 not a 0 (it is 65).
So the remainder will be 4, not 9.

69 ÷ 5 = 13 remainder 4.

To be able to divide two-digit numbers by single digits

Activity 3:

Use partitioning and place-value counters to solve these division calculations.

a) **53 ÷ 4**

b) **94 ÷ 9**

c) **84 ÷ 6**

d) **43 ÷ 3**

e) **87 ÷ 7**

Have a go at these questions using the quiz on Google Classrooms!

Can you predict which of these calculations will have a remainder? How do you know?