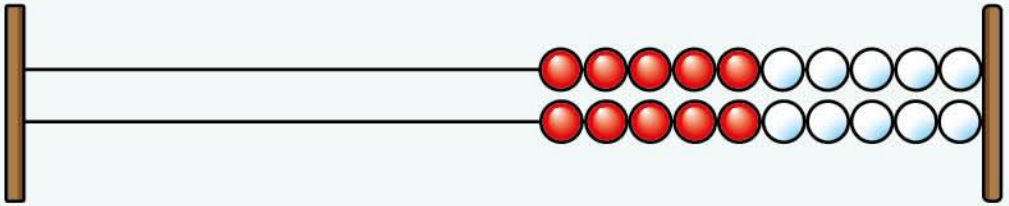
Autumn Block 1

Place value

Use a Rekenrek in the ready position.



Ask children to show a number on their Rekenrek.

Can they write the number in numerals?

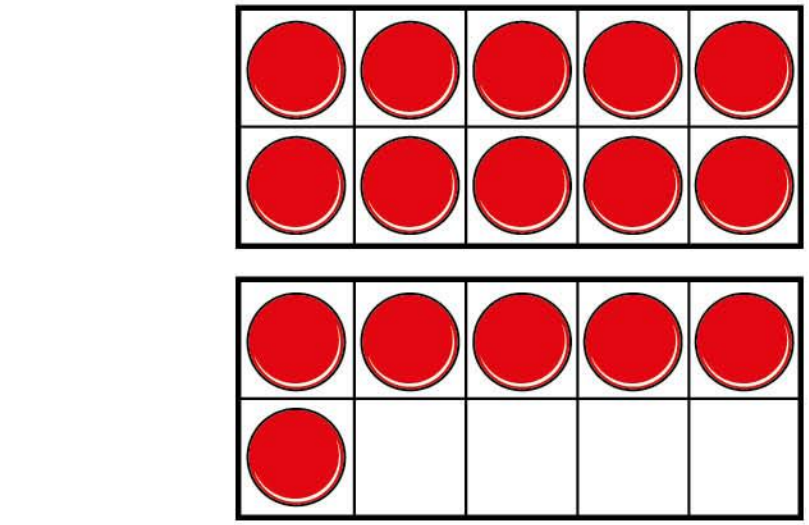
Can they write the number in words?

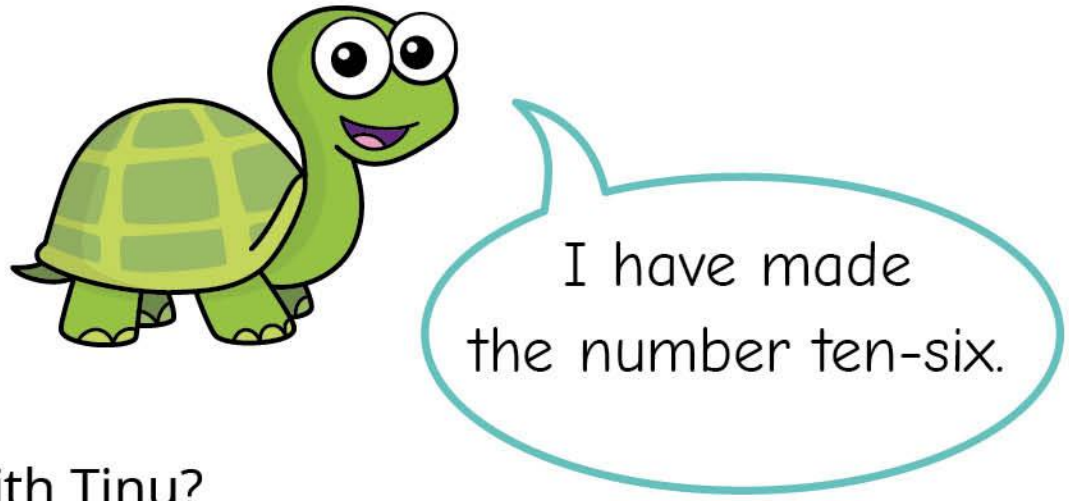
Can they say the number out loud?

Get children to work with a partner to make numbers and write them in both numerals and words.

Encourage them to talk about how they have made the number, for example to make 13, they need to push 1 whole ten and then 3 more.

Tiny uses counters and ten frames to make a number.

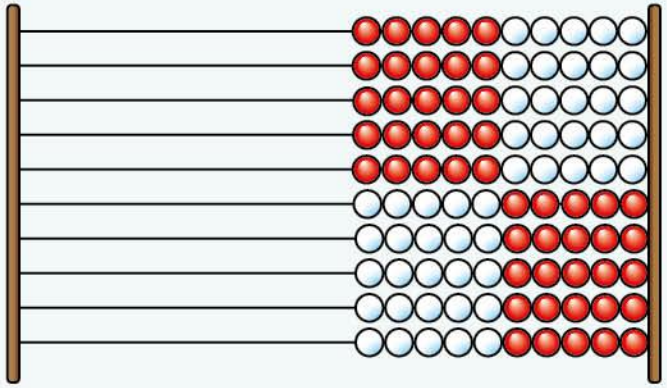




Do you agree with Tiny?

Talk about it with a partner.

Use a Rekenrek in the ready position.



Ask children to show a number on their Rekenrek.

Can they write the number in numerals?

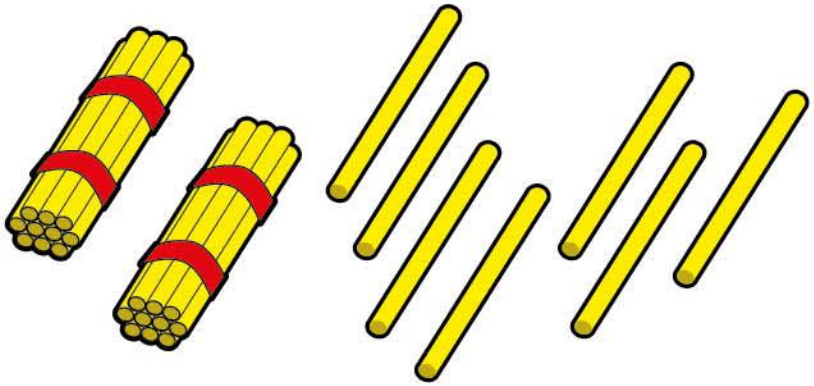
Can they say the number out loud?

How did they make the number?

Get children to work with a partner to make numbers.

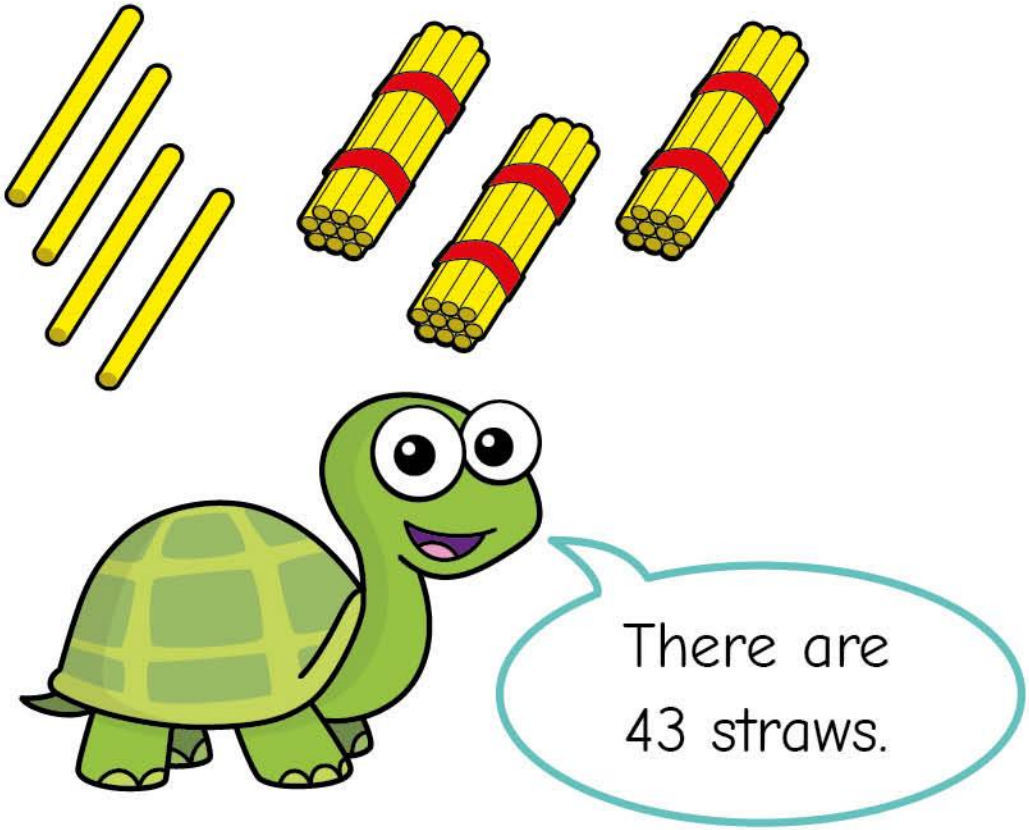
Encourage them to talk about how they have made the number, for example to make 43, they need to push 4 whole tens and then 3 more.

Here are 27 straws.

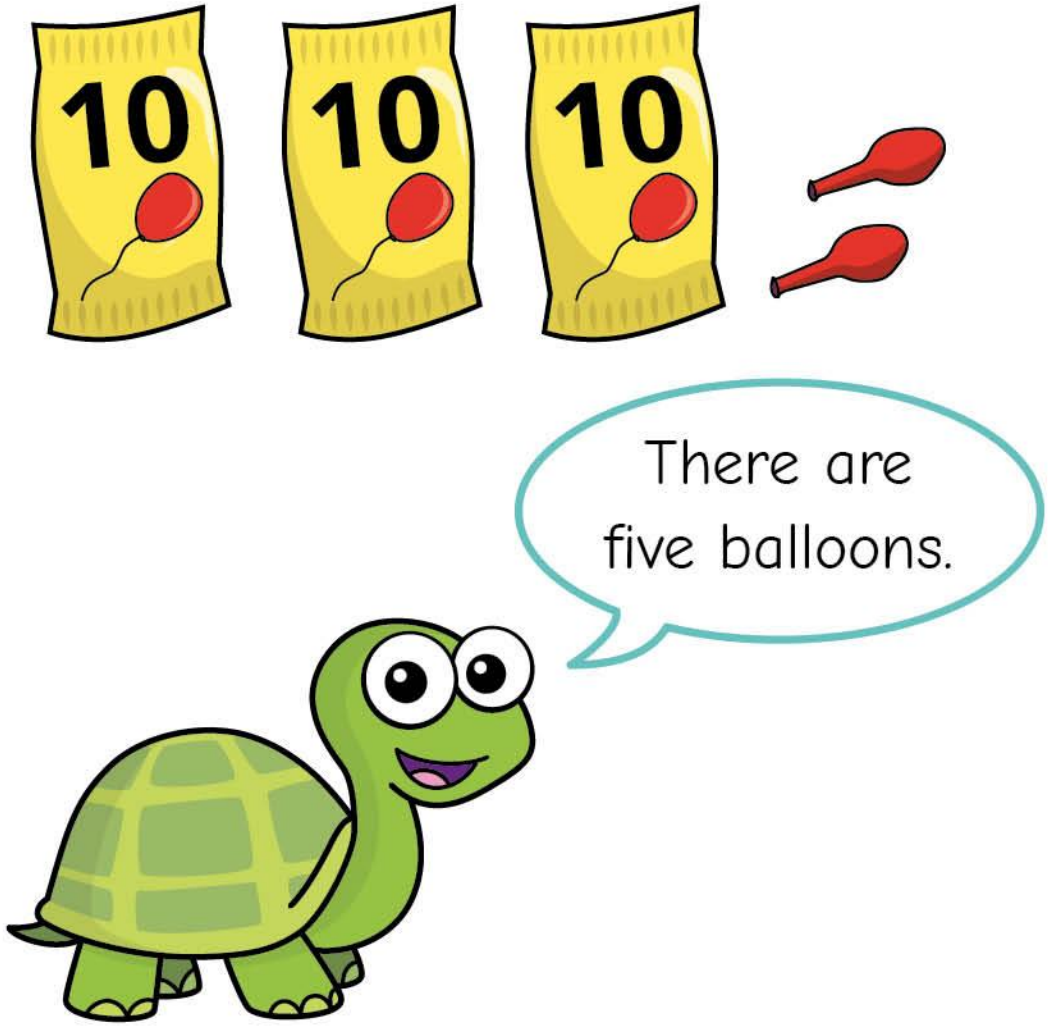


What does the 2 in 27 show?

What does the 7 in 27 show?



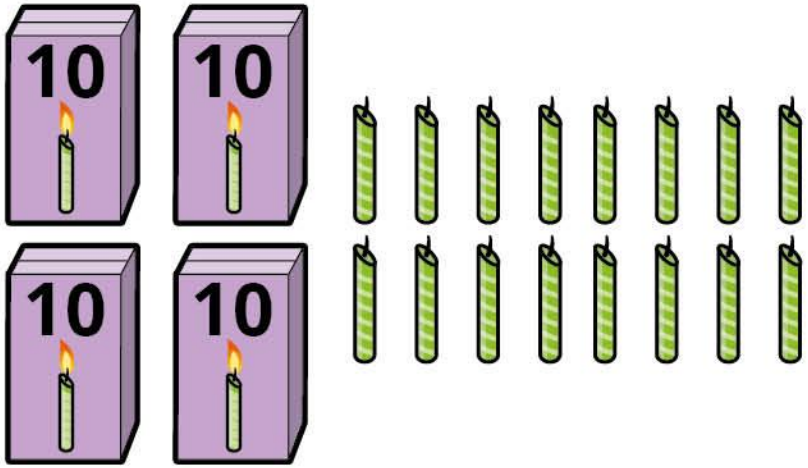
What mistake has Tiny made?



Do you agree with Tiny?

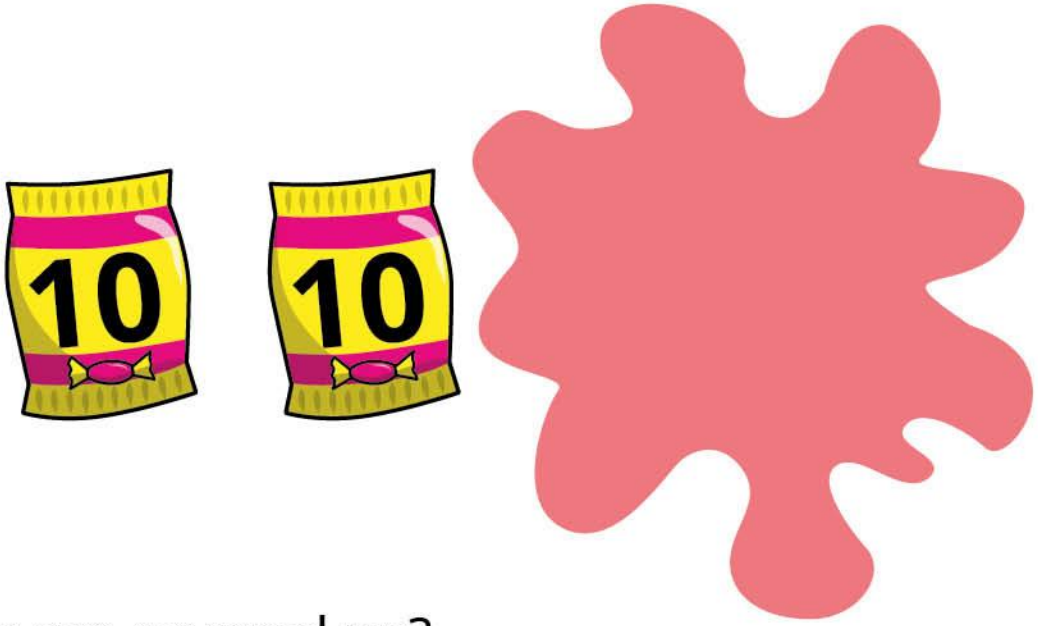
Talk about it with a partner.

How many candles are there?



How did you count them?

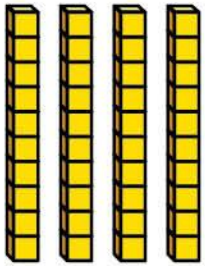
There are 32 sweets in total.



How many sweets are covered up?

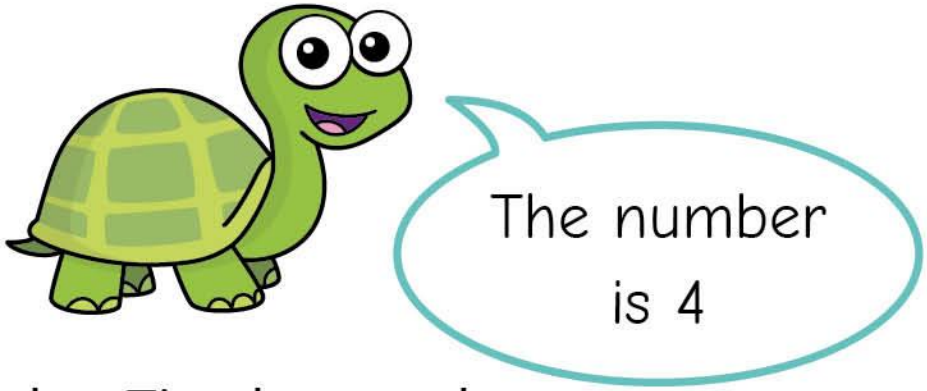
Will all the sweets be in a bag?

Tiny uses base 10 to make a number.



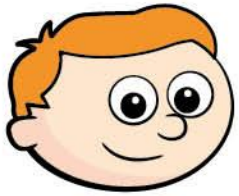
Tiny writes the number in a place value chart.

Tens	Ones
	4

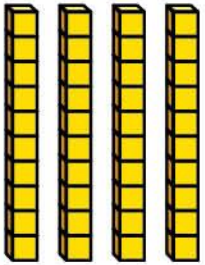


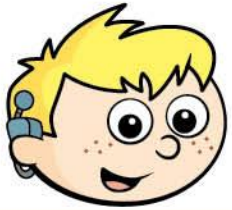
Explain the mistake that Tiny has made.

Ron and Max have each made a number in a place value chart.

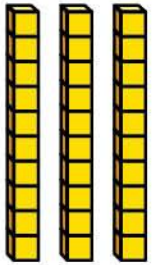
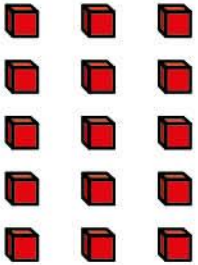


Ron

Tens	Ones
	



Max

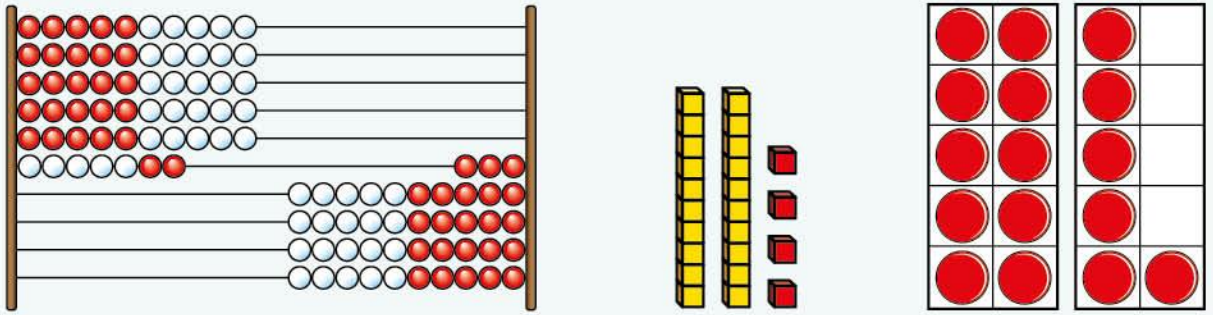
Tens	Ones
	

Is the statement true or false?

> Ron and Max have made the same number.

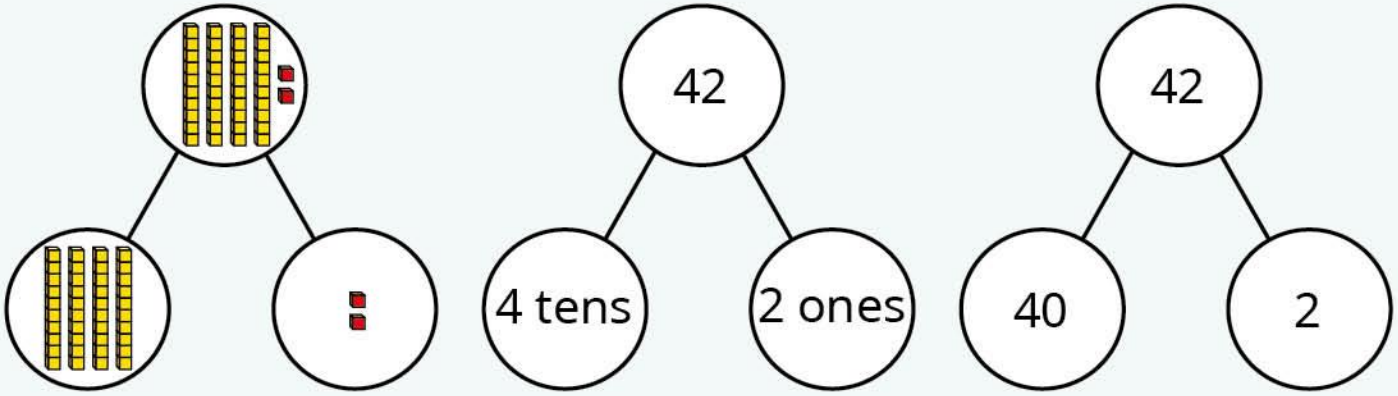
Talk about it with a partner.

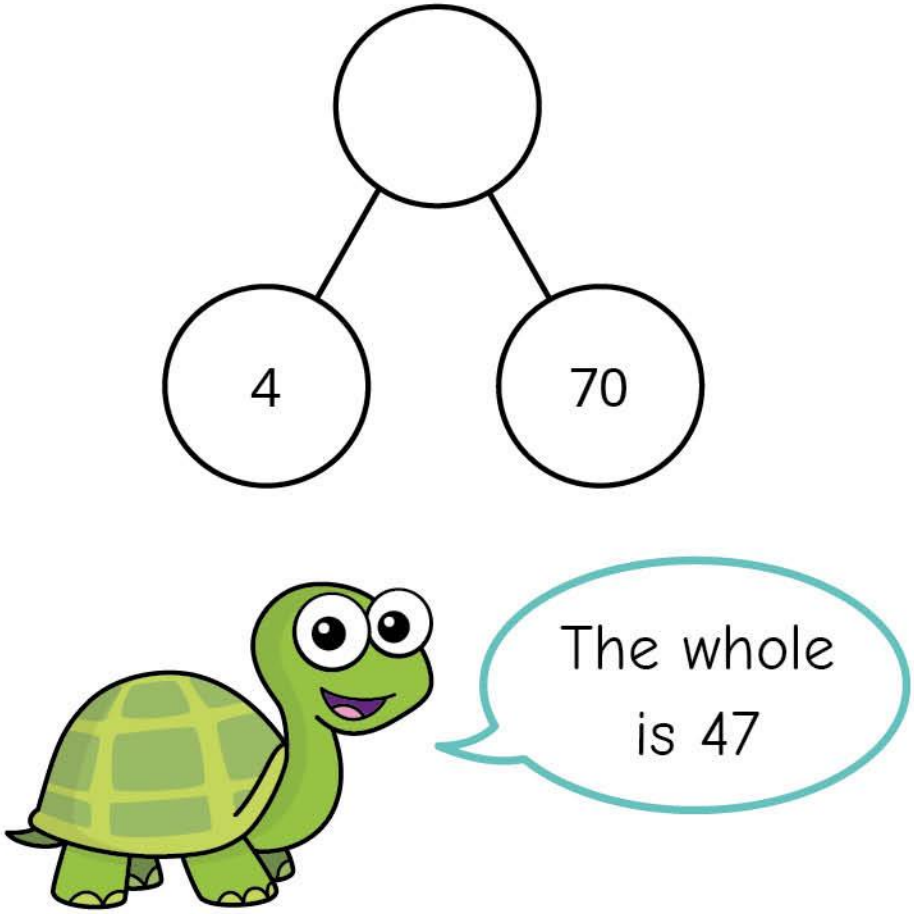
Ask children to use some equipment from this block to make numbers to 100



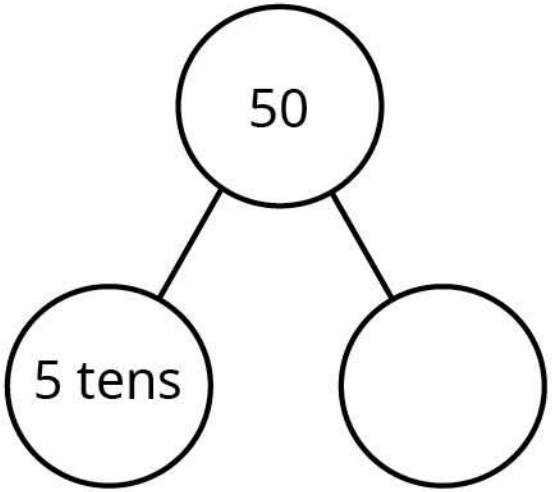
Ask children to partition their number into tens and ones using a part-whole model.

They should be able to complete the part-whole model in different ways. For example, here are some ways they could partition 42





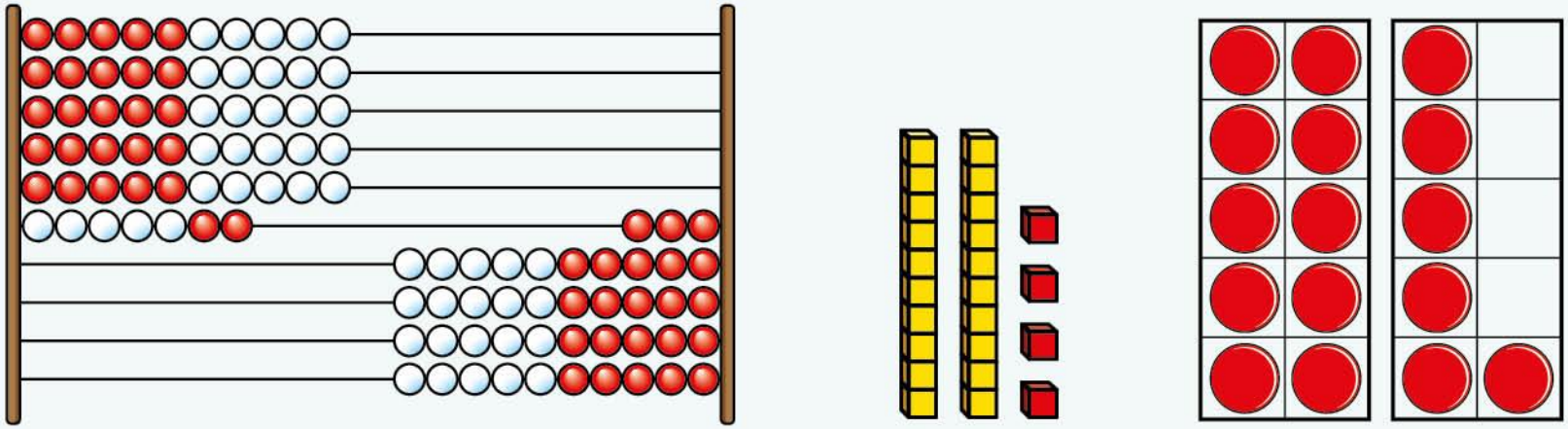
What mistake has Tiny made?



What is the missing part?

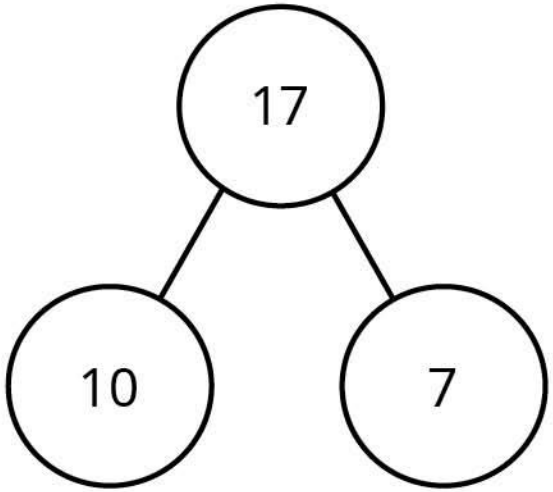
How do you know?

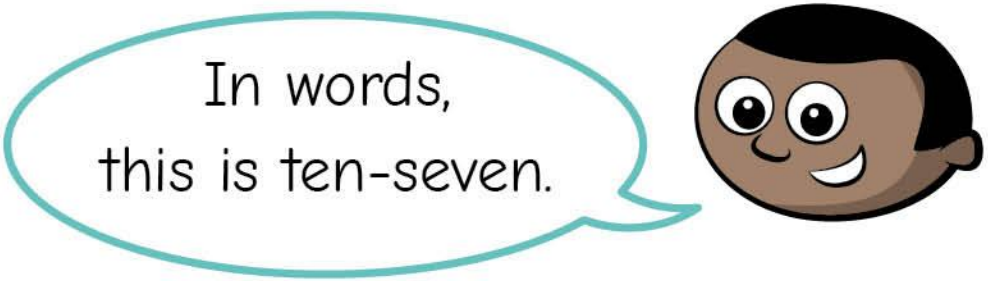
Consolidate learning from this block by making numbers in a variety of different ways.



Ask children to partition their numbers and then use the partitions to help them write the numbers in words.

Encourage children to work through a series of consecutive numbers, for example 72, 73, 74, and discuss with a partner any patterns that they notice.

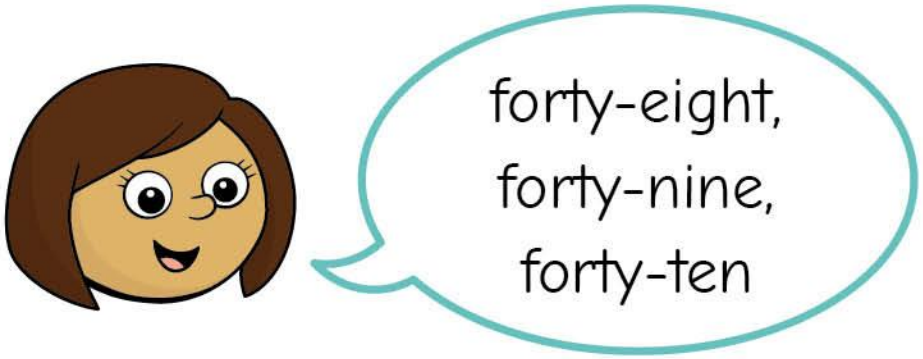




Do you agree with Mo?

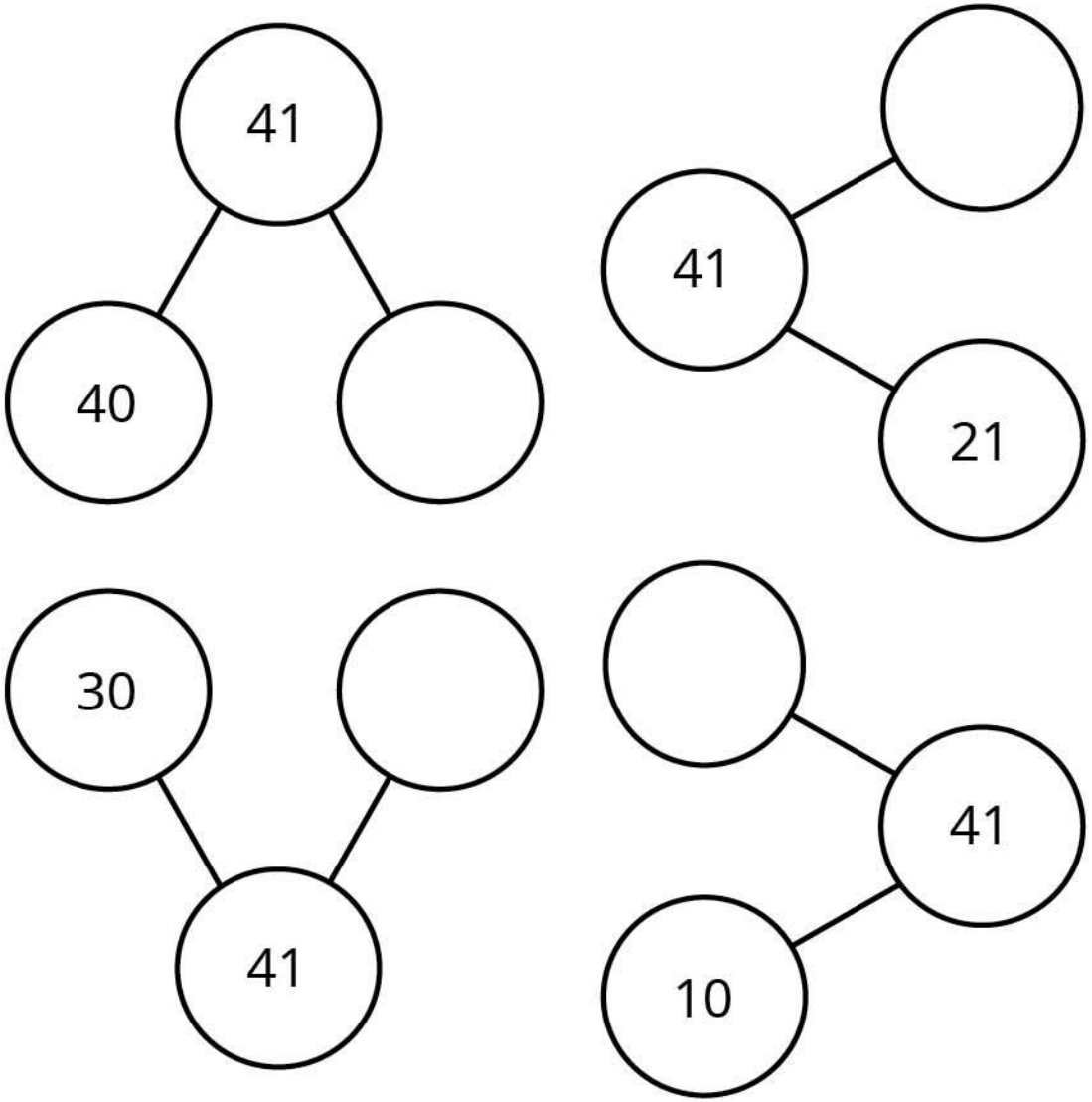
Talk about it with a partner.

Kim is counting.



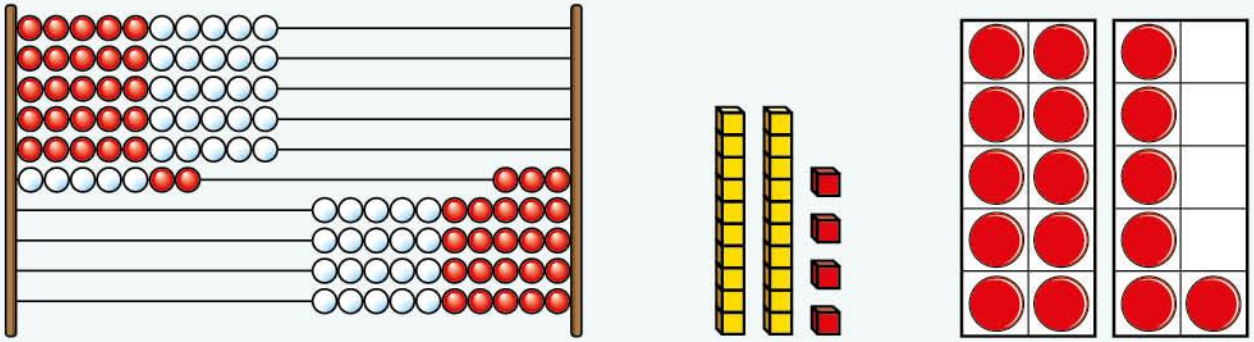
Explain the mistake that Kim has made.

Complete the part-whole models to partition 41 in four different ways.



What patterns can you see?

Ask children to use different representations from this block to make a number.



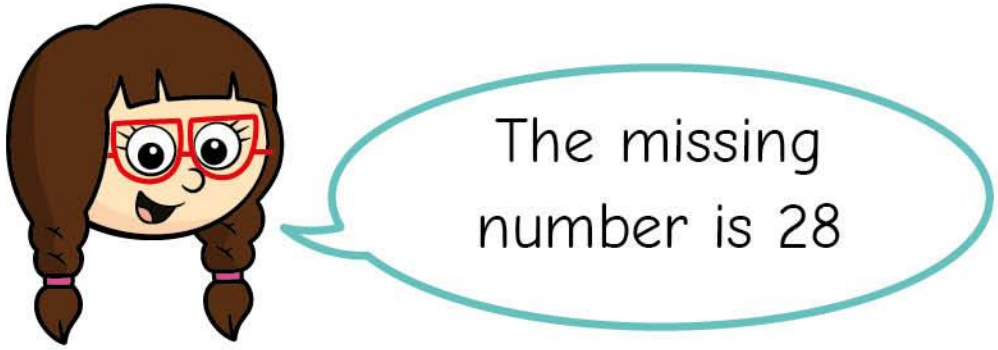
Ask them to partition their number in a part-whole model.

Can they partition it in another way?

Get children to work in pairs to partition numbers in different ways and describe any patterns that they notice.

Children could explore what happens when they move ones rather than just moving tens, although this is not essential.

$\square = 2 + 80$



Explain the mistake that Jo has made.

What is the missing number?

Complete the number sentences.

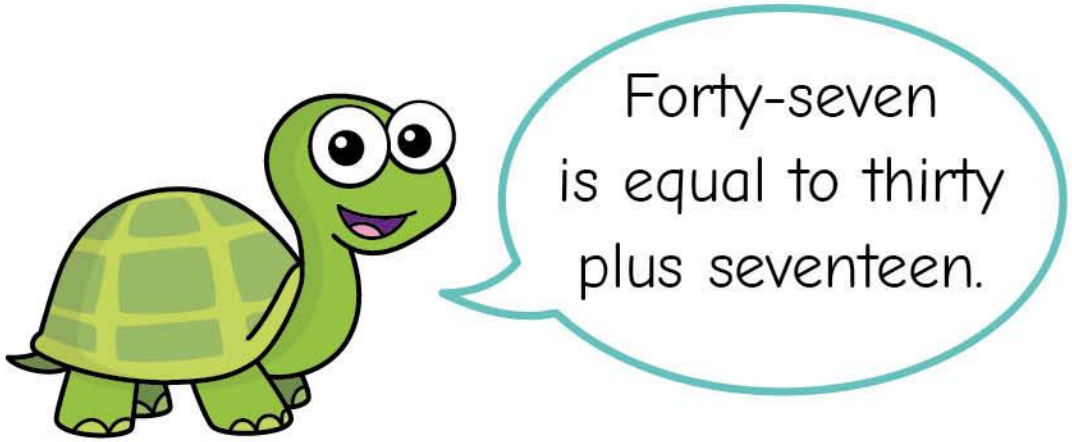
$54 = 50 + \_\_\_\_$

$54 = 40 + \_\_\_\_$

$54 = \_\_\_\_ + 24$

Continue the pattern.

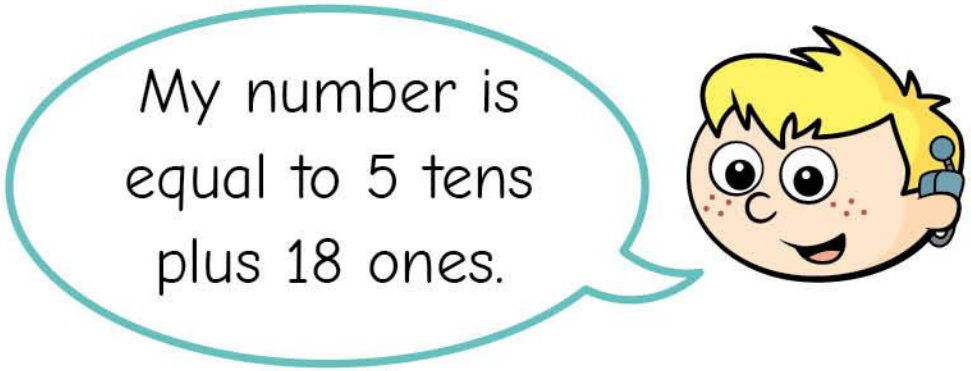
What do you notice?



Do you agree with Tiny?

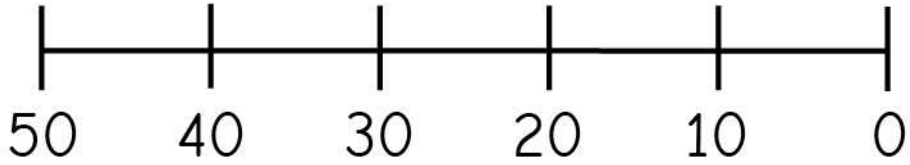
Talk about it with a partner.

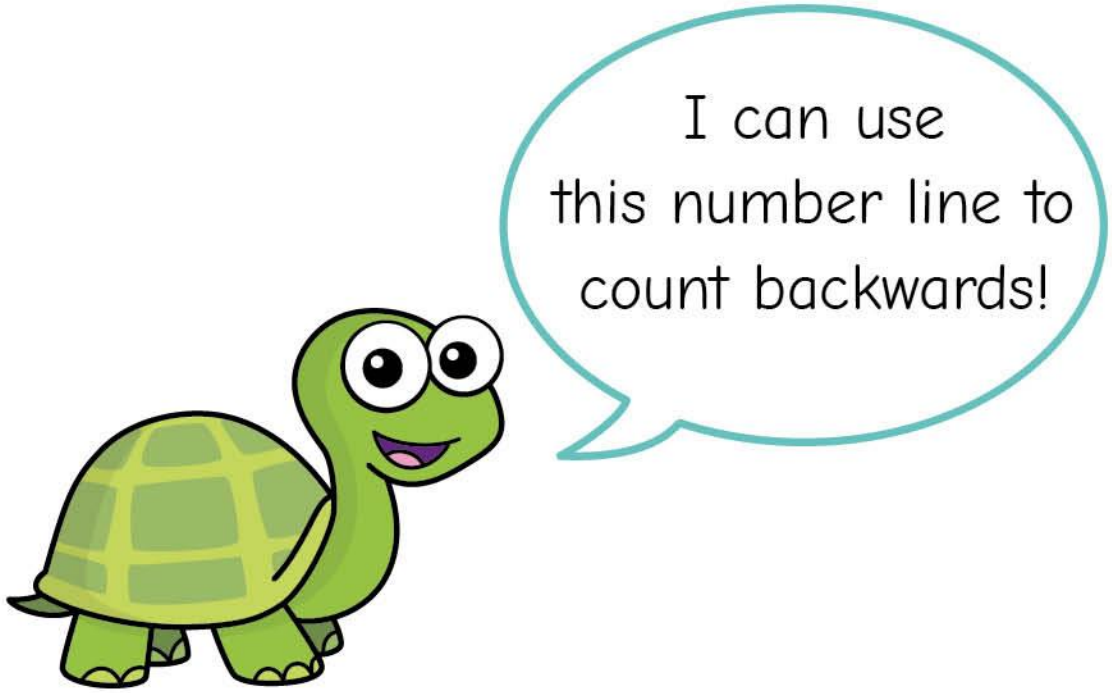
Max is thinking of a number.



What is Max's number?

Tiny has drawn a number line from 0 to 50

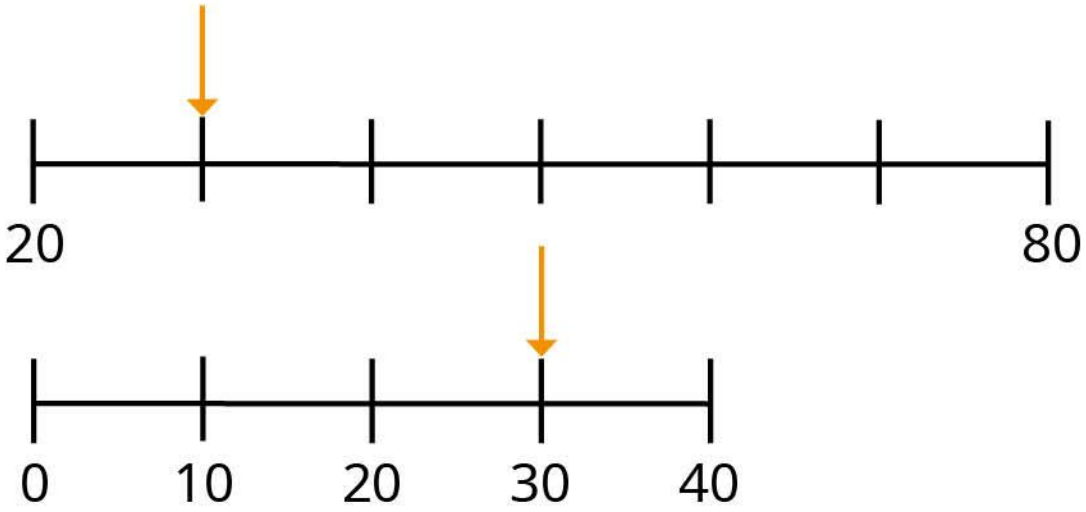


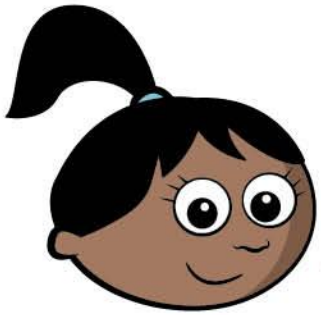


Explain the mistake that Tiny has made.

Draw a number line from 0 to 50

How can you use the number line to count backwards?

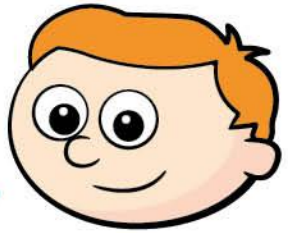




Sam

The arrows are pointing to the same number.

That can't be true – they are in different places.

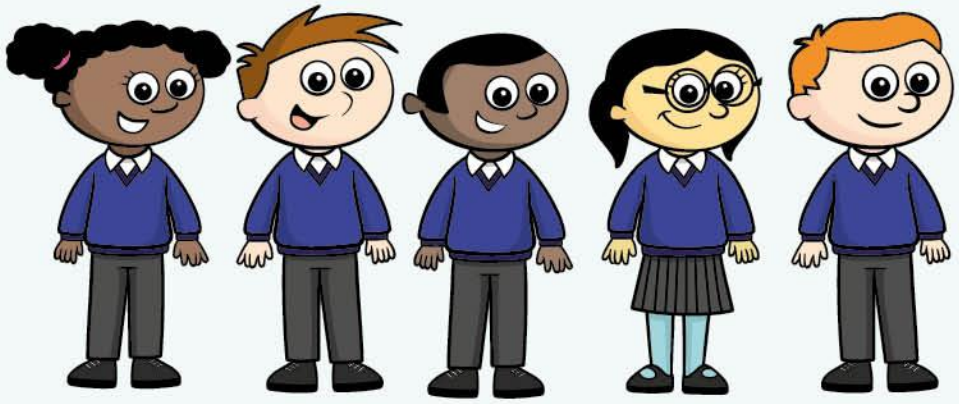


Ron

Who is correct?

Talk about it with a partner.

Get children to stand in a line to represent a number line.



Give the first and last child a number.

What number is everyone else?

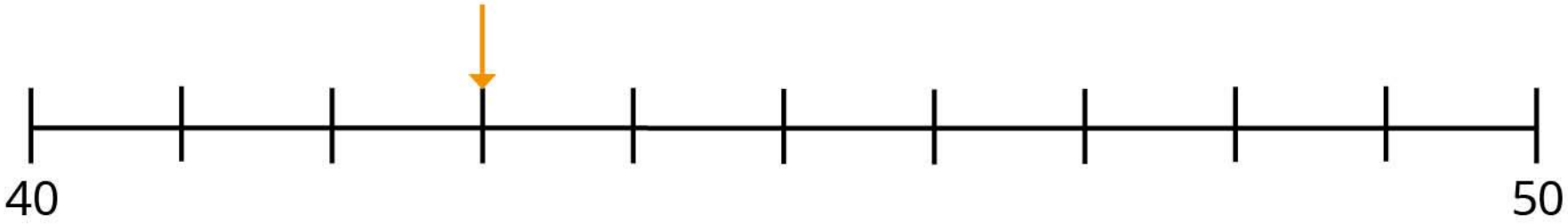
Give the first or last child a number.

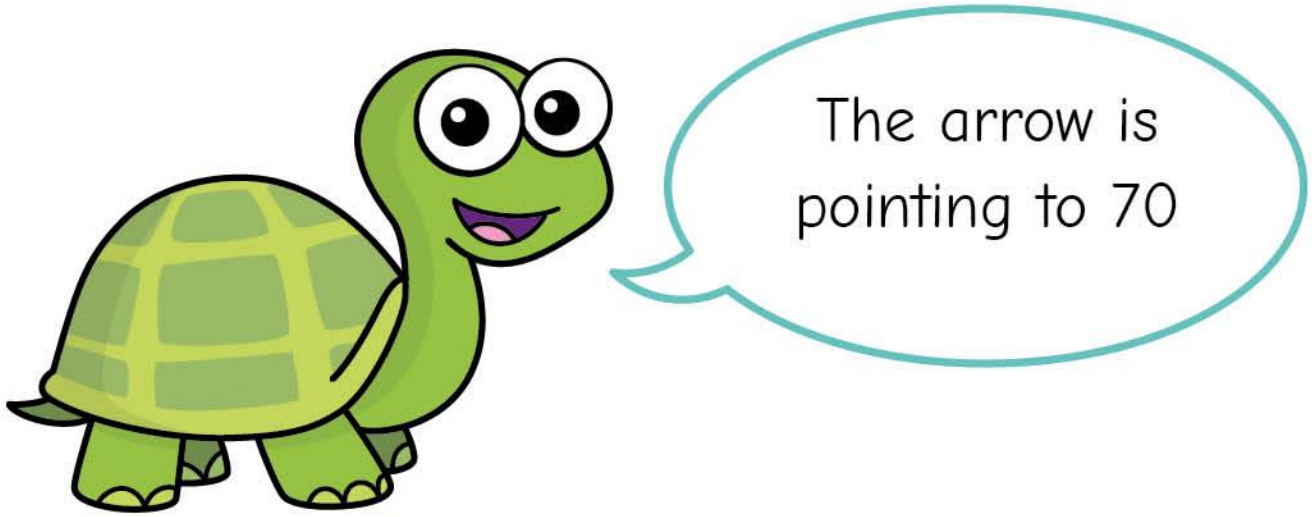
What number is everyone else?

If this person is this number, where is this number?

If this person is this number, can number ____ put their hand up?

Consolidate this and the previous step by including number lines in 10s as well as in 1s.

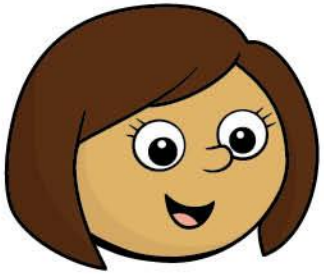


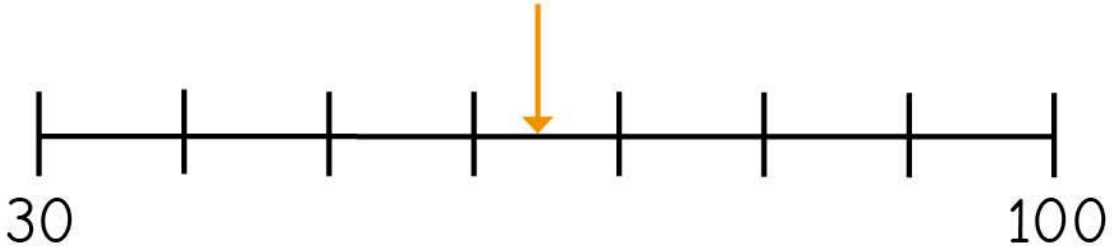


What mistake has Tiny made?

Talk about it with a partner.

Kim draws an arrow on a number line to show a number.





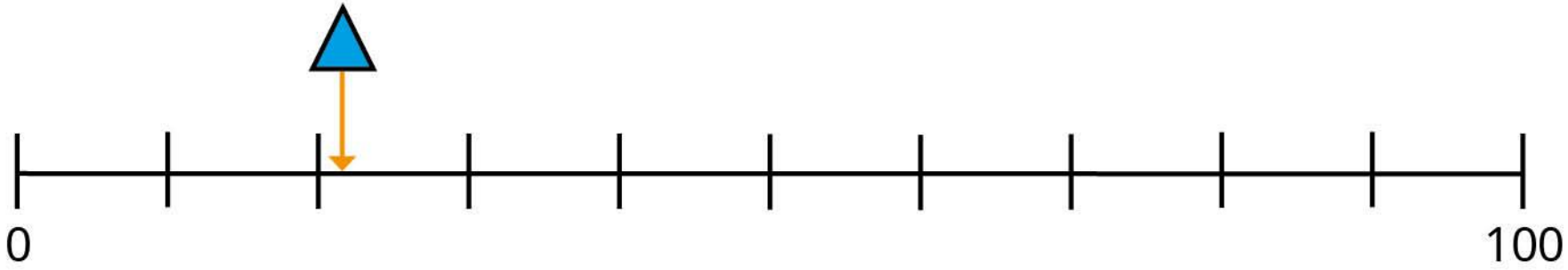
What could Kim's number be?

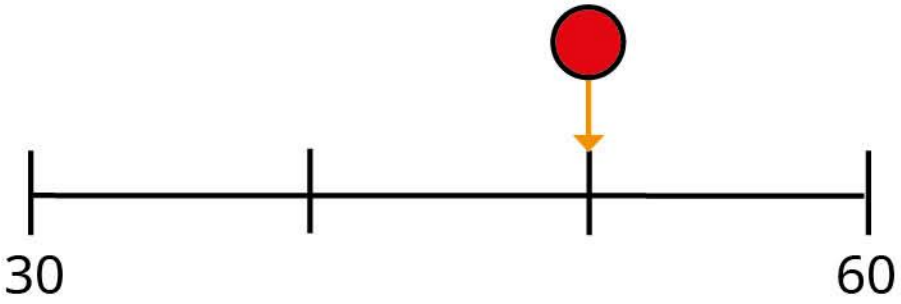
What can Kim's number **not** be?

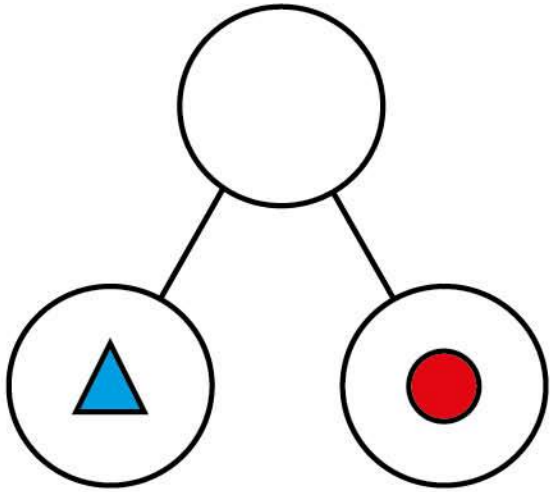
What numbers must Kim's number be between?

Compare answers with a partner.

Do you have exactly the same answers?







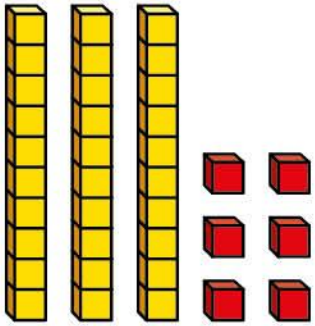
Complete the part-whole model.

Give your answer in numerals and words.

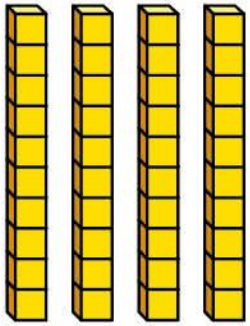
Compare methods with a partner.

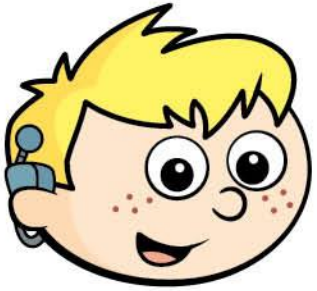
Max and Jo are comparing numbers.

Max's number



Jo's number





My number is greater because I have more objects.

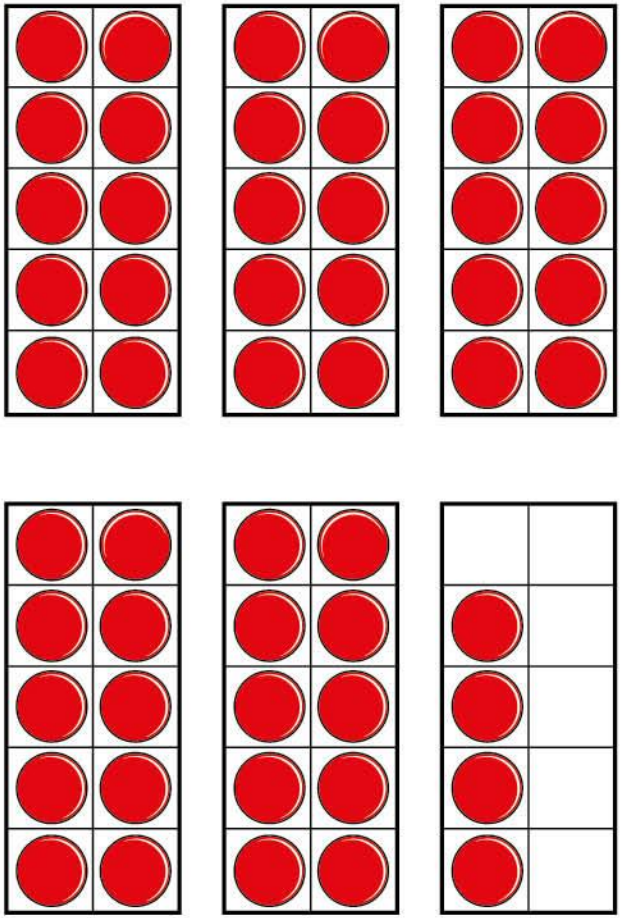
Max

Is Max correct?

Explain your answer.

Sam is comparing two numbers.

Draw base 10 to make the statement correct.



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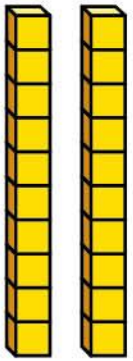
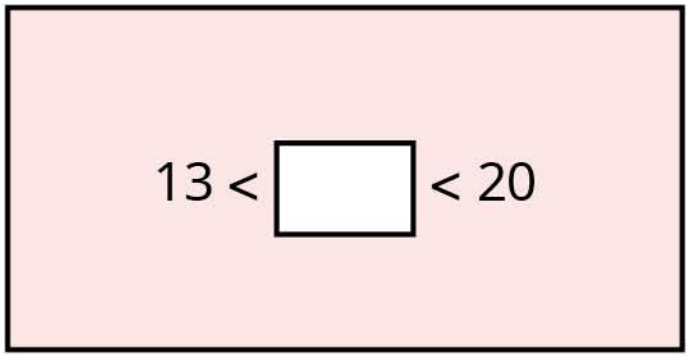
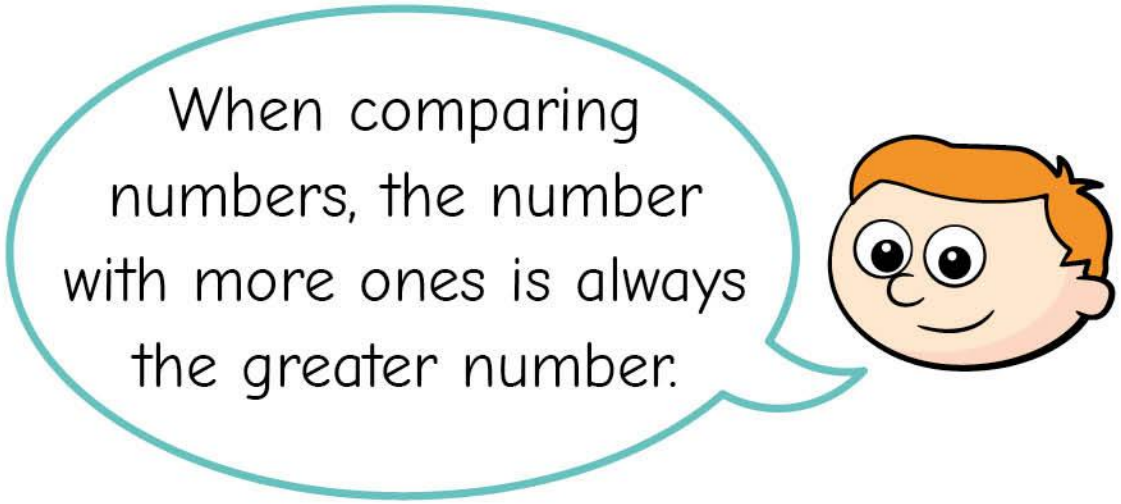


How much did you add to make the numbers equal?

What is the missing number?



Is there more than one answer?



Do you agree with Ron?

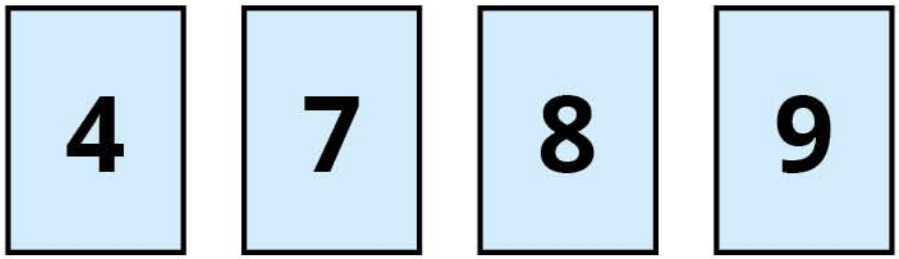
Give some examples to support your answer.

Is the statement true or false?

1 ten and 12 ones is greater than 2 tens.

How do you know?

Here are some digit cards.



Use the digit cards to make the statement correct.

_ 7 > 8 _ > _ _

How many answers can you find?

Ask each child to write a 2-digit number on a whiteboard.

Ask the children as a class to order their numbers from:

- smallest to greatest
- greatest to smallest.

Prompt children to talk about what happens if they have written the same number.

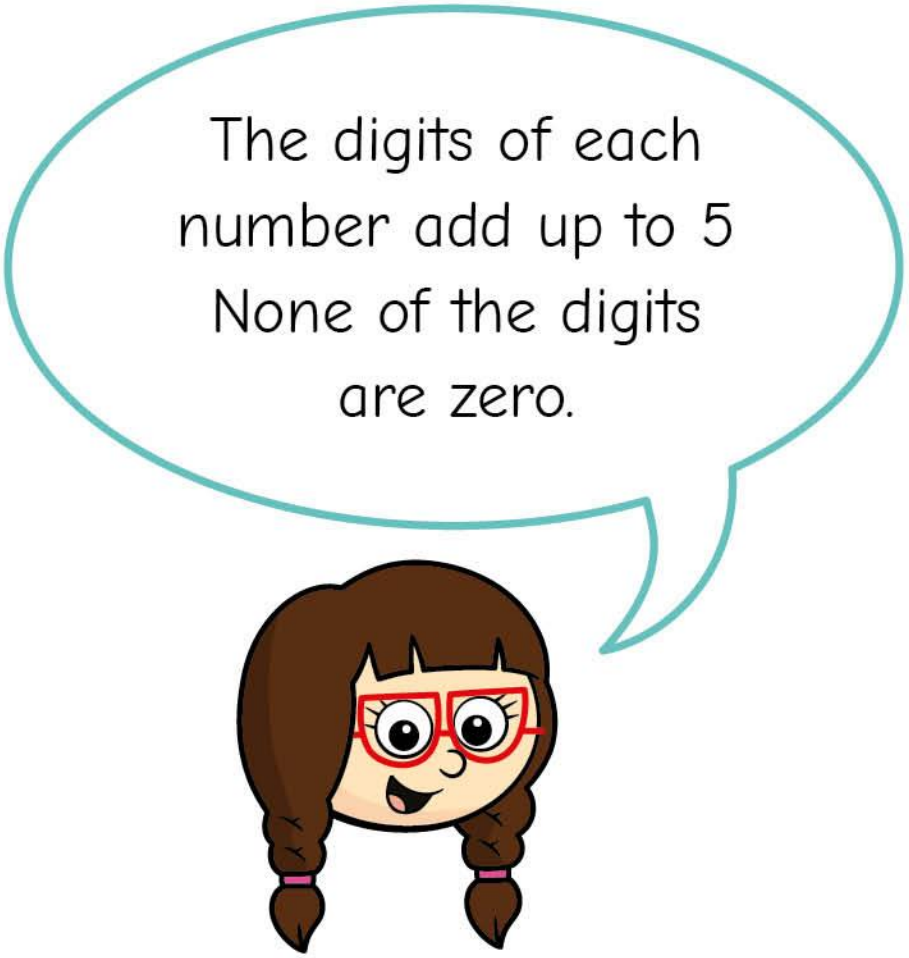
42, 40, 56, 71, 99

Write the numbers in order, from smallest to greatest.

Write the numbers in order, from greatest to smallest.

What do you notice?

Jo writes a list of four 2-digit numbers.

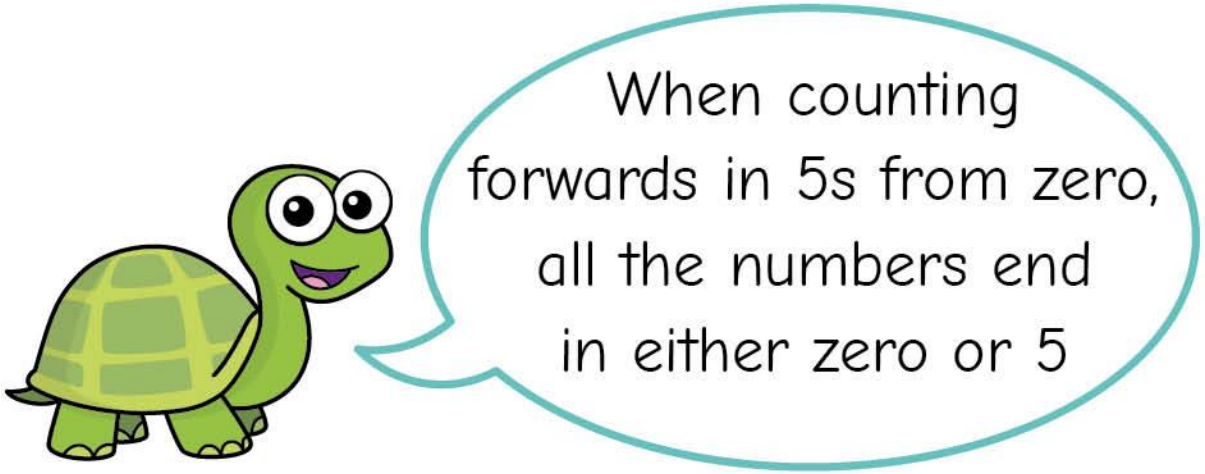


What are Jo's numbers?

Write the numbers in order, from smallest to greatest.

How did you do it?

Tiny is counting in 5s.



Is Tiny correct?

Explain your answer.

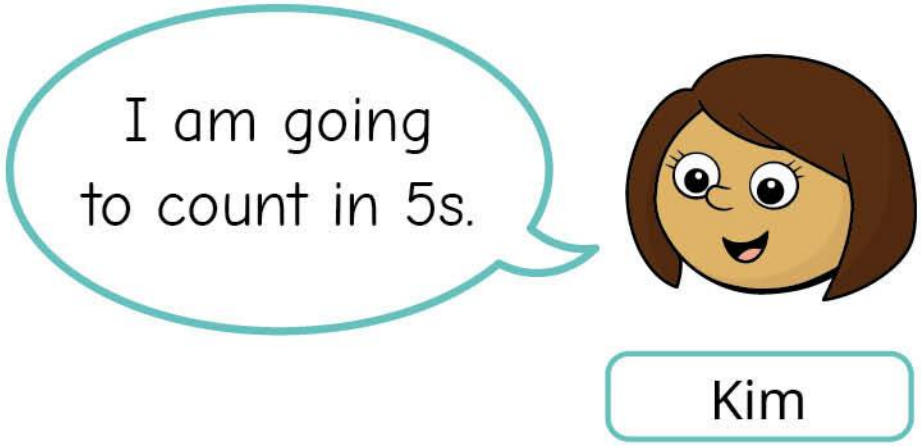
Are the statements always true, sometimes true or never true?

When counting in 2s from zero, the numbers you say are even.

When counting in 5s from zero, the numbers you say are even.

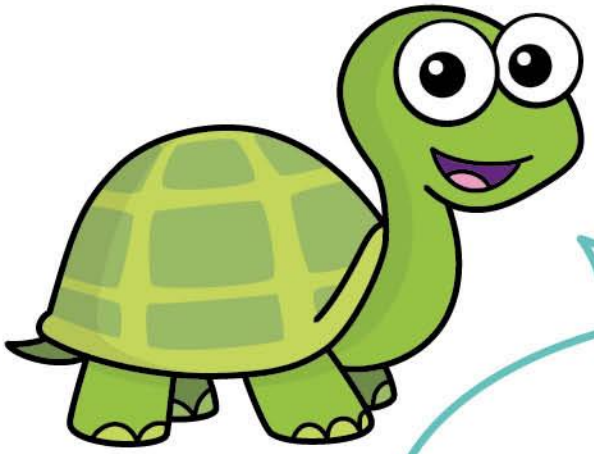
When counting in 10s from zero, the numbers you say are even.

Mo and Kim are counting backwards from 100



What numbers will they both say?

What do you notice?



If I start at zero and count in 3s, I will say the number 14

Is Tiny correct?

Explain your answer.

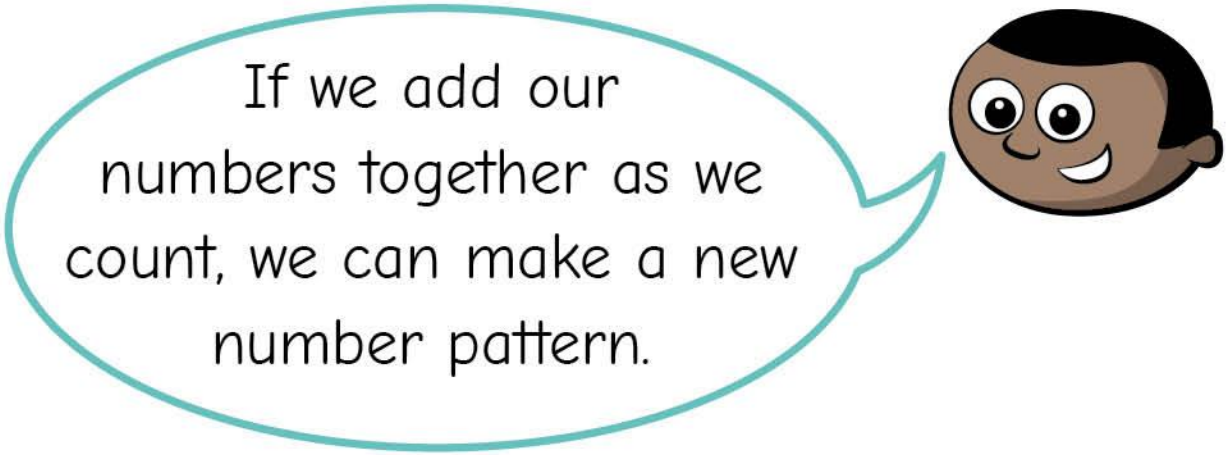
Ben has 15 stickers.

He collects 3 more stickers each day.

How many stickers will he have after 6 days?

Mo is counting in 2s and Kim is counting in 3s.

Mo	2	4	6	8
Kim	3	6	9	12
Total				



What pattern do they make?

Sam and Ron count in 5s and add their numbers together as they count.

What new pattern do they make?