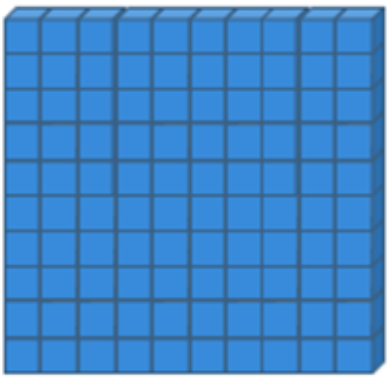


To be able to represent values in the 100s, 10s and 1s columns using place value counters

Starter:

Which one doesn't belong?



Answer. Prove. Explain.

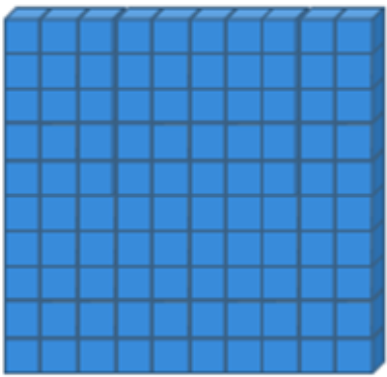
Success Criteria

- I can use place value counters to represent different three digit numbers
- I can explain the value of a three digit number

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Starter:

Which one doesn't belong?



Success Criteria

- I can use place value counters to represent different three digit numbers
- I can explain the value of a three digit number


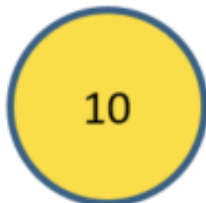
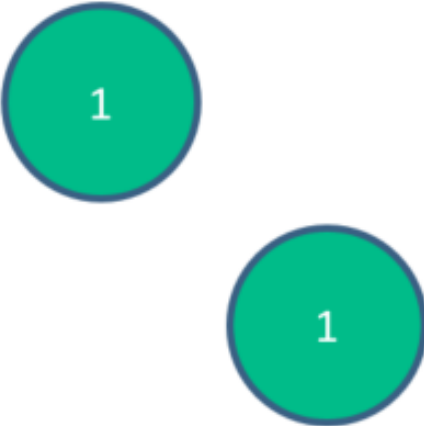
The Numicon shape doesn't belong as it is worth seven, whereas the Dienes block (Base 10), the 100 dollar bill from the USA and the place value counter are each worth 100.

Answer. Prove. Explain.

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:


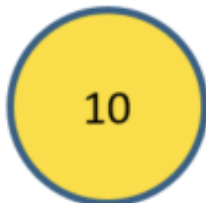
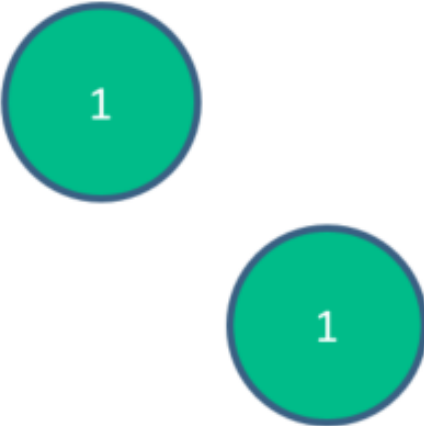
Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Writing in numerals and words, what is the value of the number represented in the place value table?

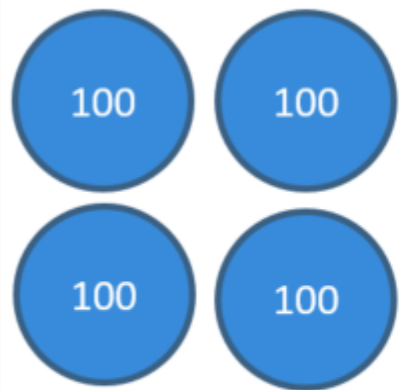
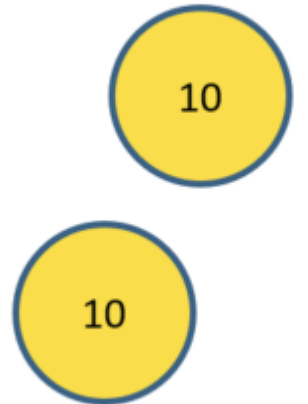
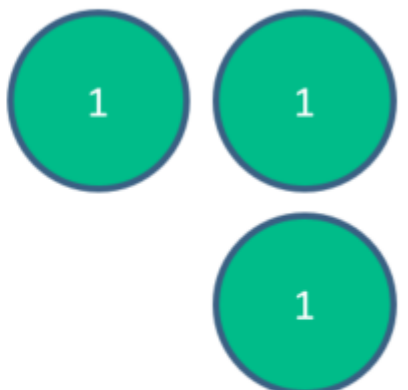
Hundreds	Tens	Ones
		

312 or three hundred and twelve

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

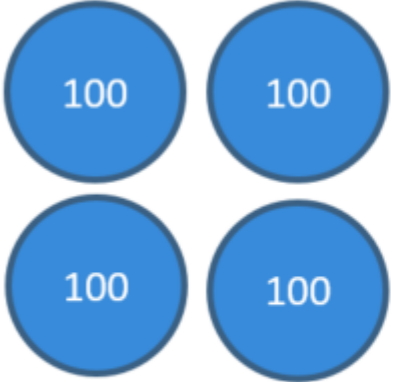
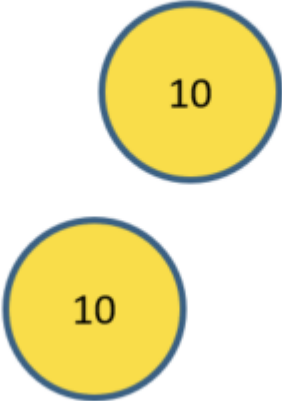
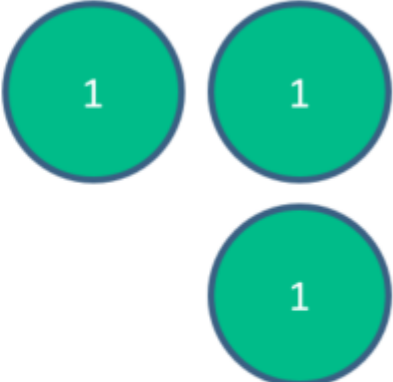
Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Writing in numerals and words, what is the value of the number represented in the place value table?

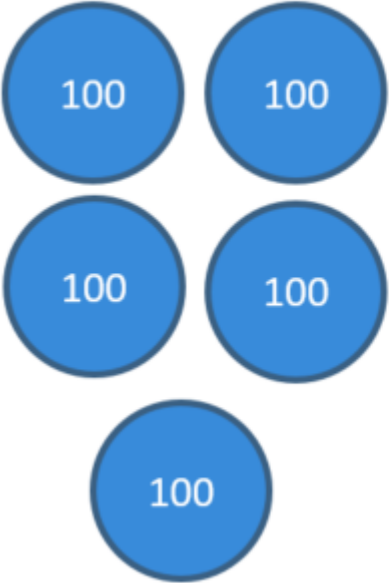
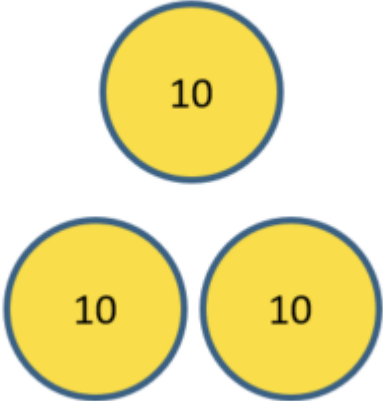
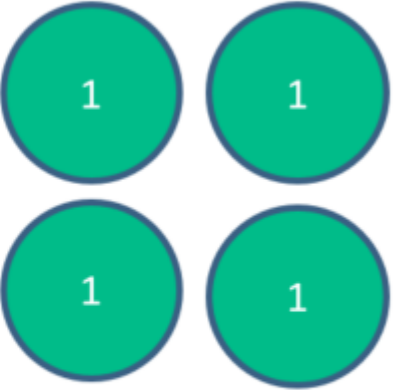
Hundreds	Tens	Ones
		

423 or four hundred and twenty-three

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

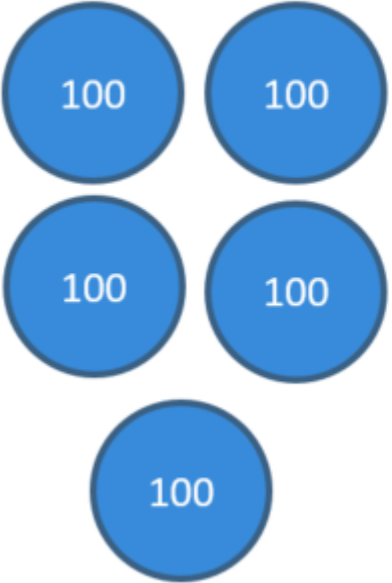
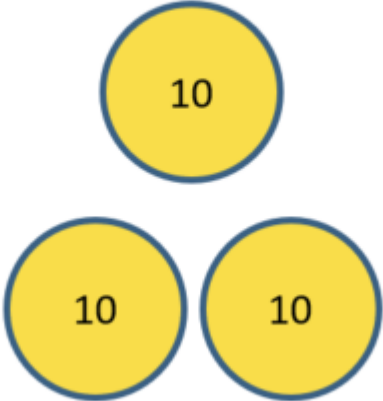
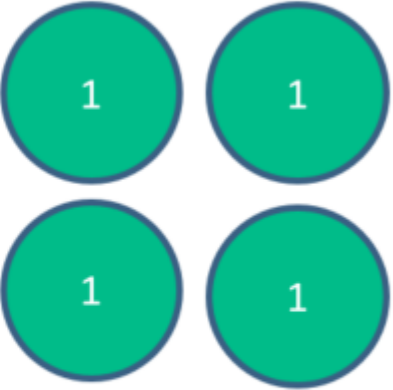
Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Writing in numerals and words, what is the value of the number represented in the place value table?

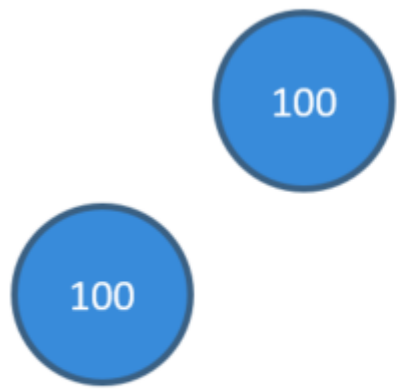
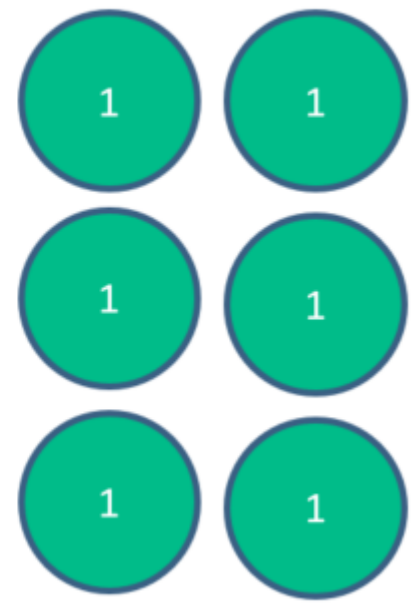
Hundreds	Tens	Ones
		

534 or five hundred and thirty-four

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

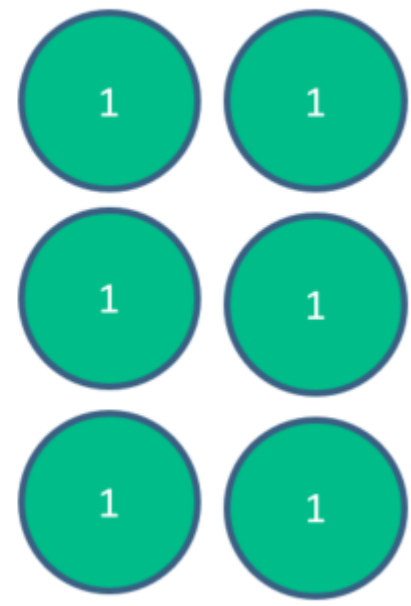
Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Writing in numerals and words, what is the value of the number represented in the place value table?


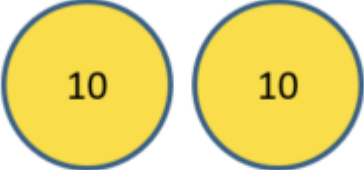

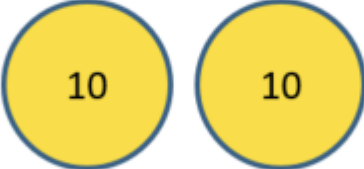

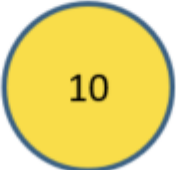
Hundreds	Tens	Ones
		

206 or two hundred and six

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:


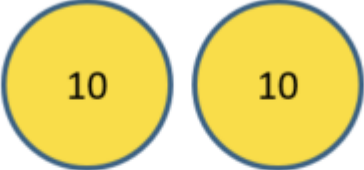

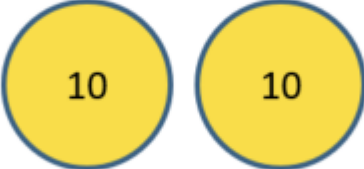

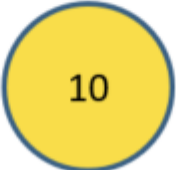
Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		
		
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Writing in numerals and words, what is the value of the number represented in the place value table?

Hundreds	Tens	Ones
		
		
		

650 or six hundred and fifty

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 1:

Write the following representations as words and numerals.

a)

Hundreds	Tens	Ones
100		1 1

b)

Hundreds	Tens	Ones
100 100	10	1 1

c)

Hundreds	Tens	Ones
100 100	10 10 10	

d)

Hundreds	Tens	Ones
100 100 100	10 10 10	1 1 1

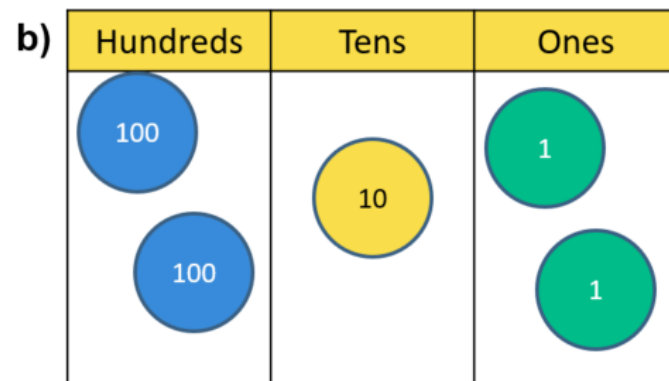
To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 1:

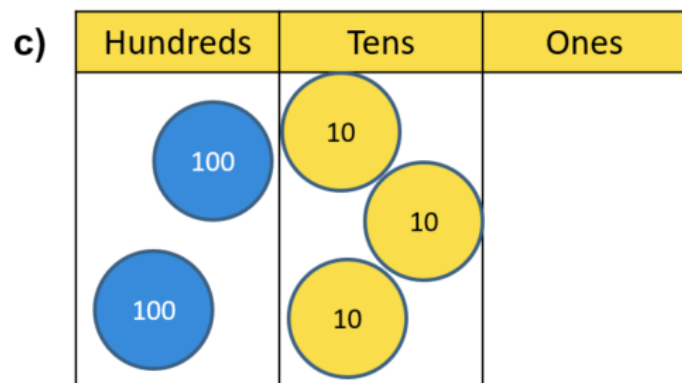
Write the following representations as words and numerals.



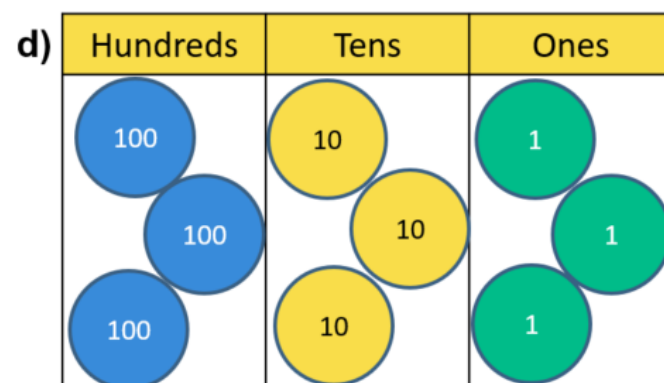
102 or one hundred and two



212 or two hundred and twelve



230 or two hundred and thirty



333 or three hundred and thirty-three

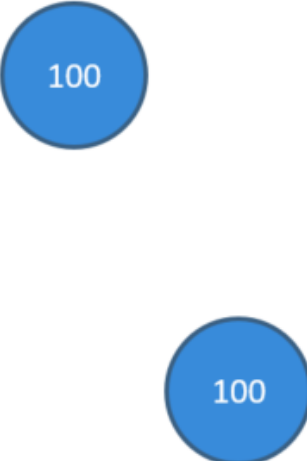

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Nigel says “The place value chart below shows two hundred and two.”

True or False?

Answer. Prove. Explain.

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters





Talking time:

Nigel says “The place value chart below shows two hundred and two.”

True or False?

Answer. Prove. Explain.

The statement is false, if there are two counters each in the hundreds and tens columns, then the amount can't be 202, it is in fact 220.

Hundreds	Tens	Ones
		
		

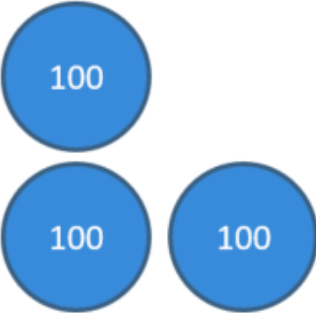
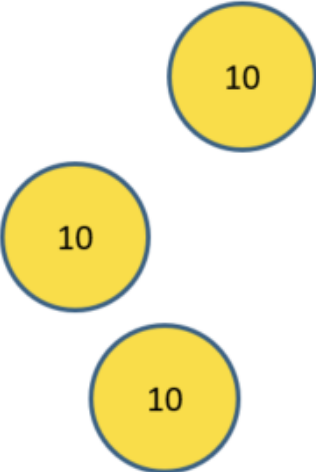

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Rachel says, “The place value chart above shows three hundred and thirty-one.”

True or False?

Answer. Prove. Explain.

Hundreds	Tens	Ones
		

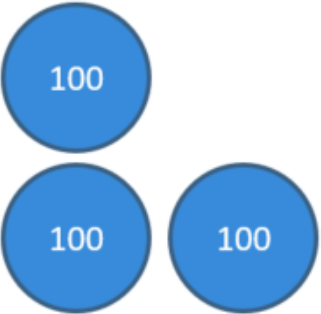
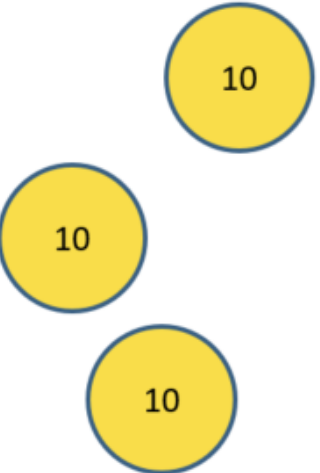

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Rachel says, "The place value chart above shows three hundred and thirty-one."

True or False?

Answer. Prove. Explain.

Hundreds	Tens	Ones
		

Rachel's statement is true. It is 331, because there are three counters in the hundreds and tens columns and one counter in the ones column.

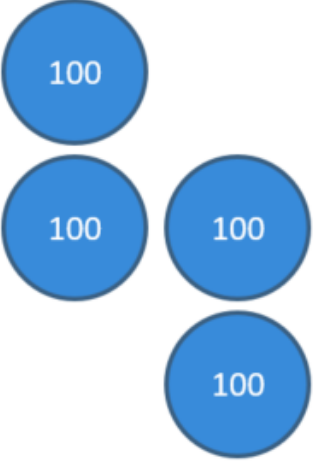
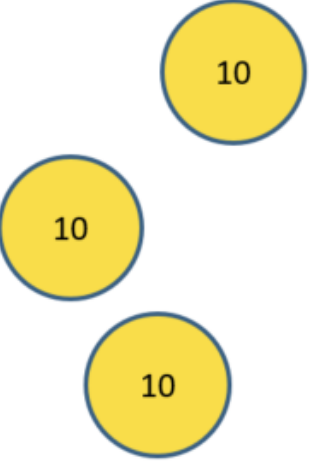

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Robert says, "The place value chart below shows four hundred and thirteen."

What went wrong?

Answer. Prove. Explain.

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

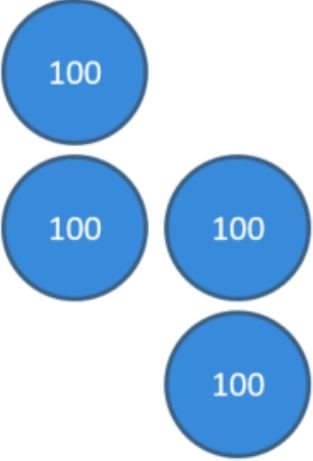
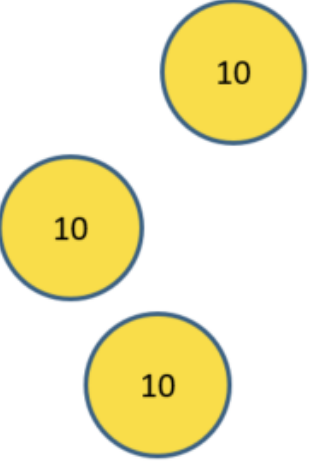

Talking time:

Robert says, "The place value chart below shows four hundred and thirteen."

What went wrong?

Answer. Prove. Explain.

Robert is incorrect. He has confused the tens and ones columns, so rather than showing 413, the place value table shows 431.

Hundreds	Tens	Ones
		

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 2:


Decide whether the statement beneath each table is true or false. Explain.

a)

Hundreds	Tens	Ones
		


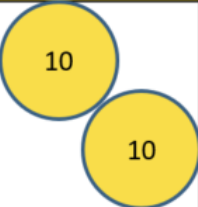
Two hundred and ten

b)

Hundreds	Tens	Ones
		

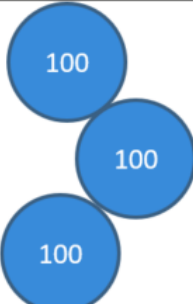

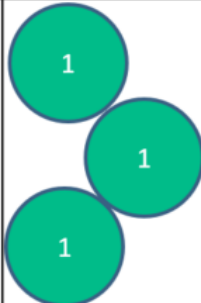
One hundred and twenty-two

c)

Hundreds	Tens	Ones
		

Two hundred and two

d)

Hundreds	Tens	Ones
		

Three hundred and three

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 2:

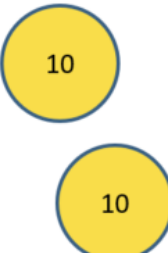

Decide whether the statement beneath each table is true or false. Explain.

a)

Hundreds	Tens	Ones
		


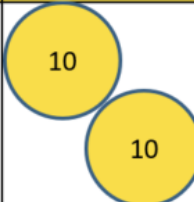
Two hundred and ten – false (201)

b)

Hundreds	Tens	Ones
		


One hundred and twenty-two - true

c)

Hundreds	Tens	Ones
		

Two hundred and two – false (220)

d)

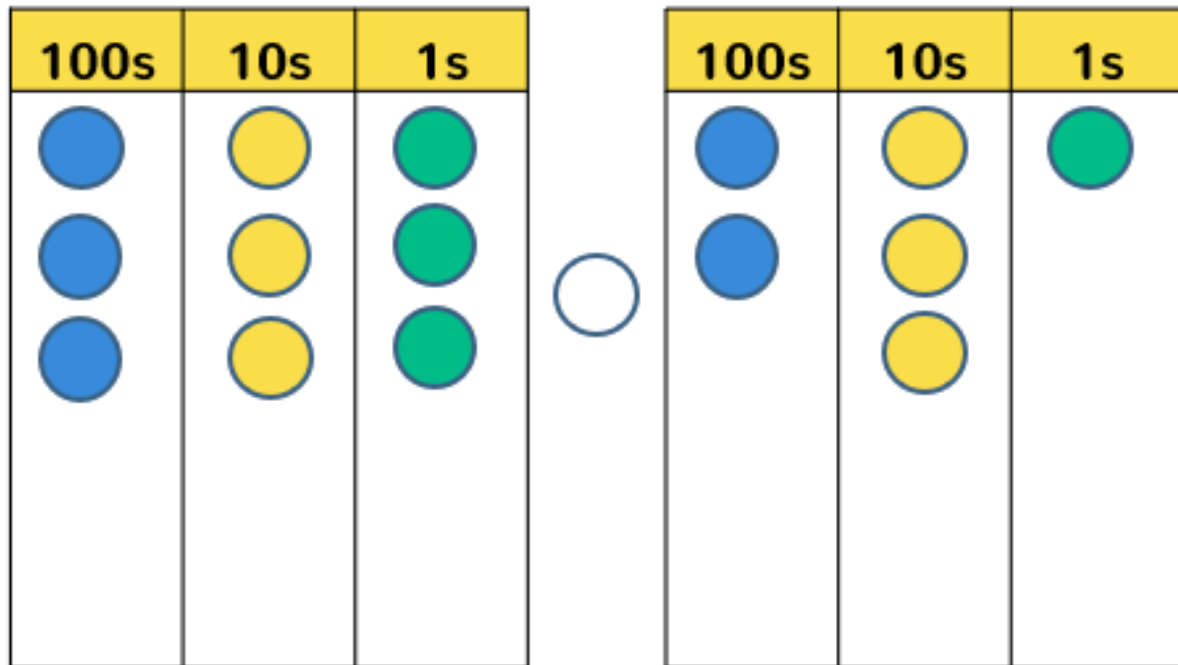
Hundreds	Tens	Ones
		

Three hundred and three – false (313)

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

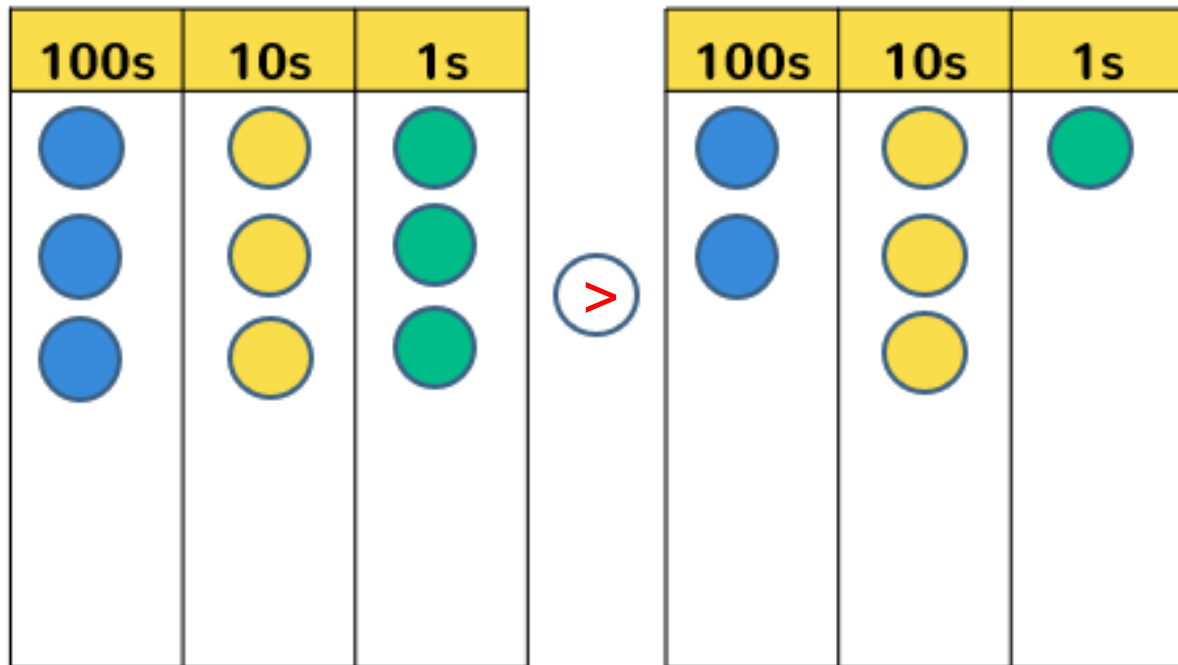
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

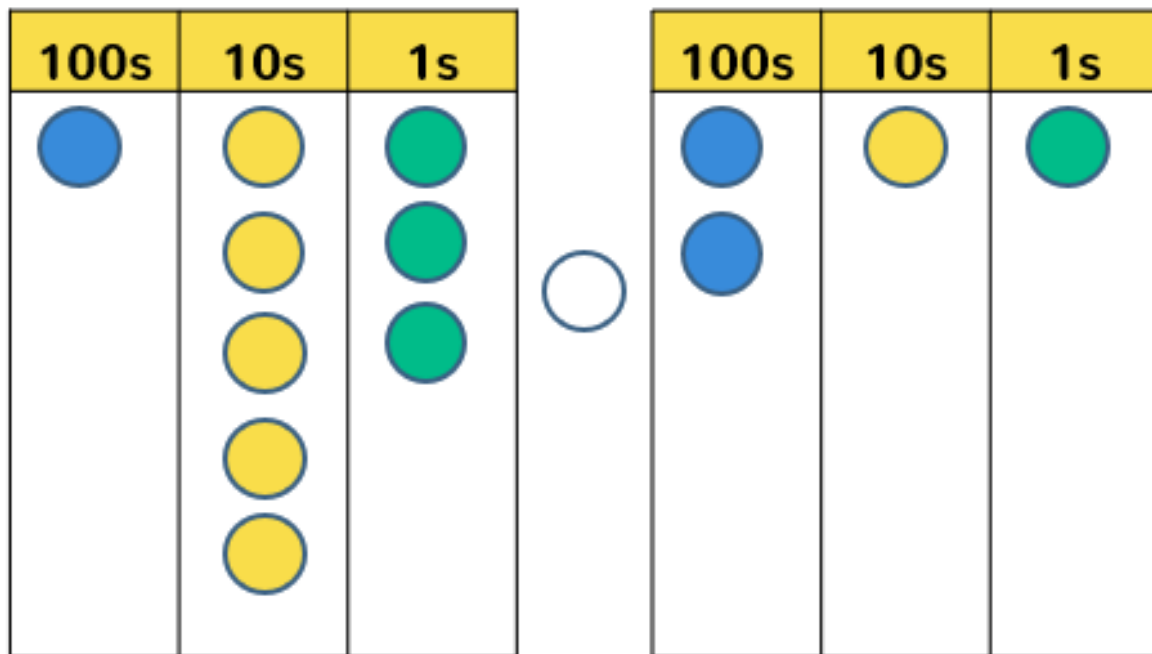
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

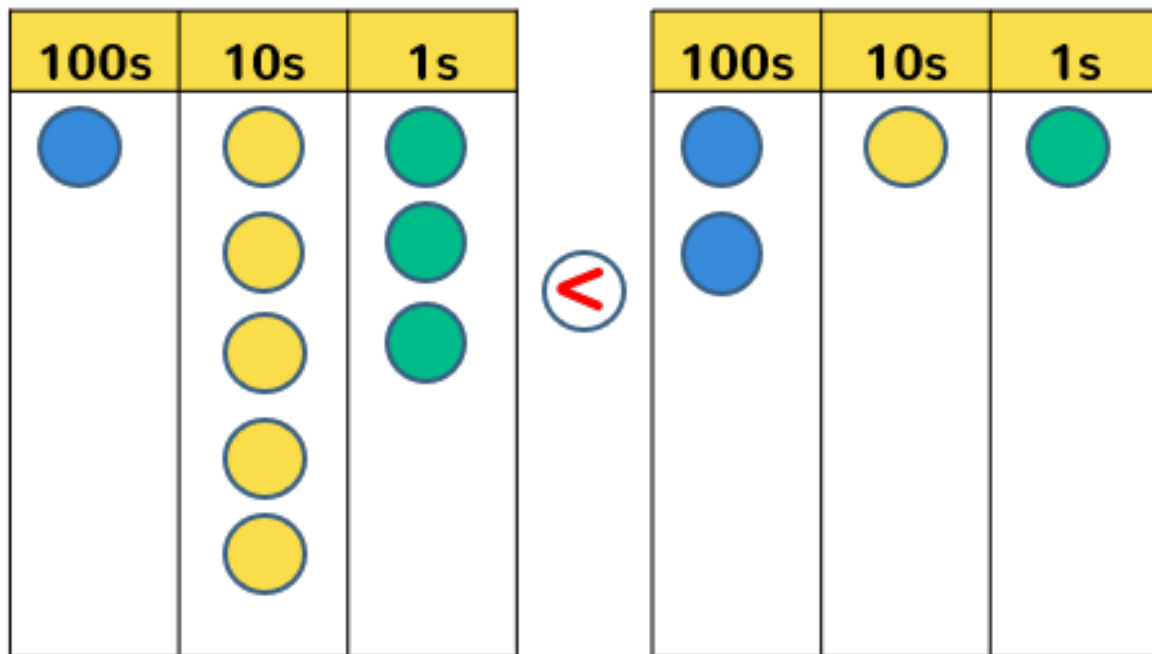
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

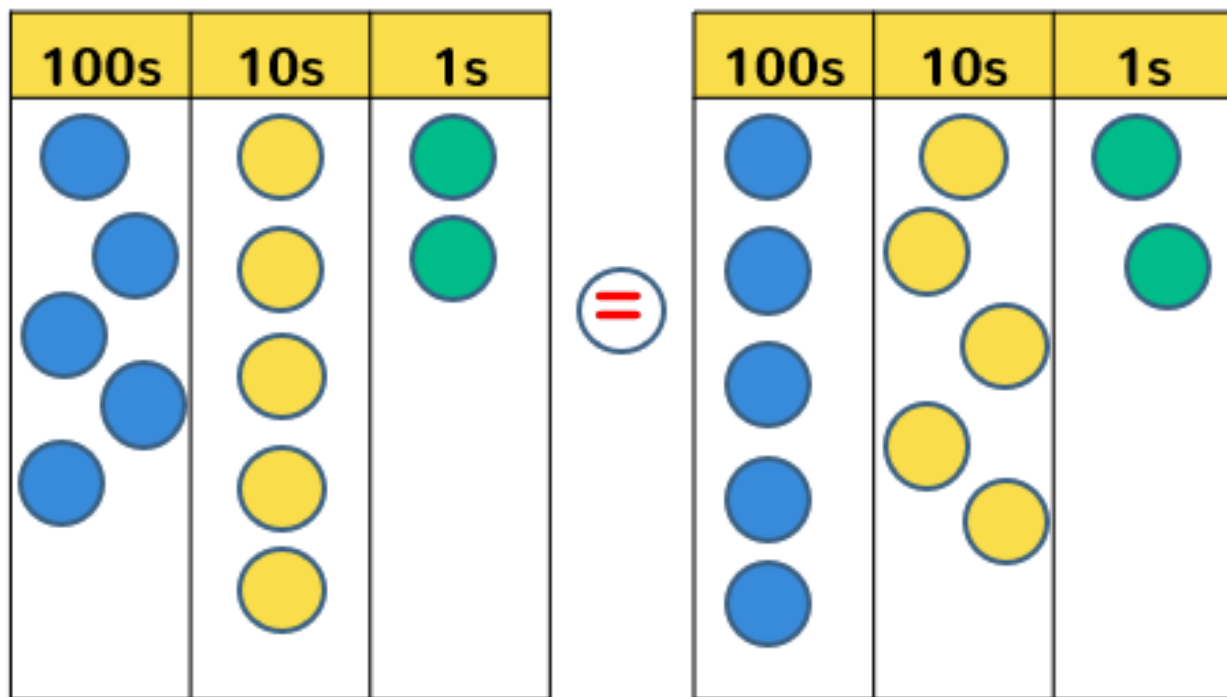
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

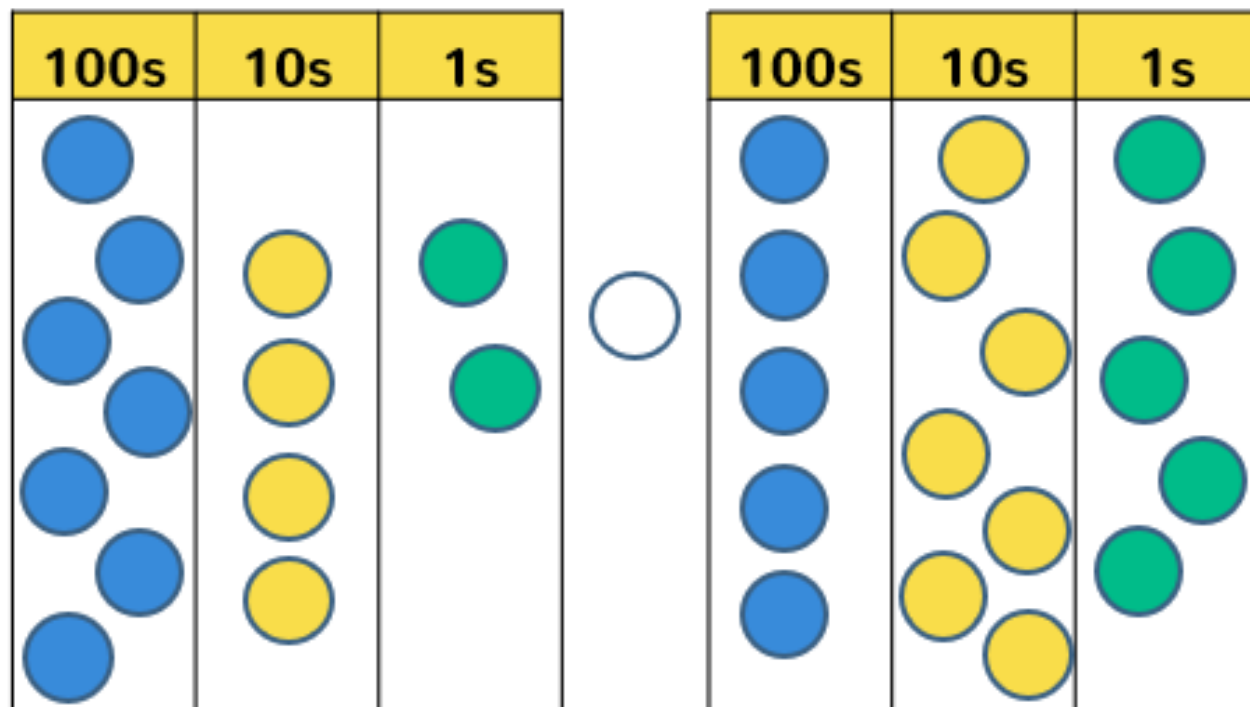
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

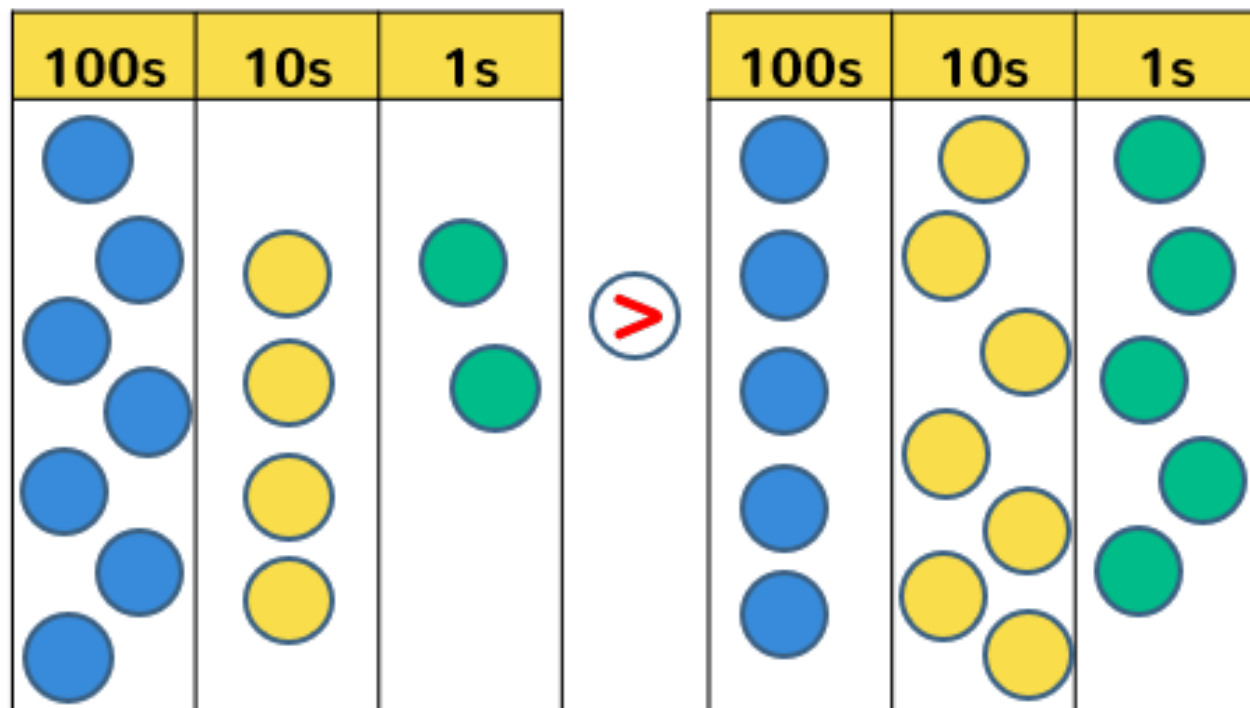
Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Talking time:

Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.



To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 3:

Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.

a)

100s	10s	1s
● ● ●	●	●

○

100s	10s	1s
● ● ● ●	●	●

b)

100s	10s	1s
● ● ● ● ●	● ●	

○

100s	10s	1s
● ● ● ●		● ●

c)

100s	10s	1s
● ● ● ● ●	● ● ● ●	● ●

○

100s	10s	1s
● ●	● ● ● ● ● ●	● ●

○

100s	10s	1s
● ● ●		● ● ● ●

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 3:

Put $<$, $>$ or $=$ in the circle in between the place value tables to make the correct statement.

a)

100s	10s	1s
3 blue circles	1 yellow circle	1 green circle

$<$

100s	10s	1s
4 blue circles	1 yellow circle	1 green circle

b)

100s	10s	1s
5 blue circles	2 yellow circles	

$>$

100s	10s	1s
4 blue circles		2 green circles

c)

100s	10s	1s
6 blue circles	5 yellow circles	2 green circles

$>$

100s	10s	1s
3 blue circles	6 yellow circles	2 green circles

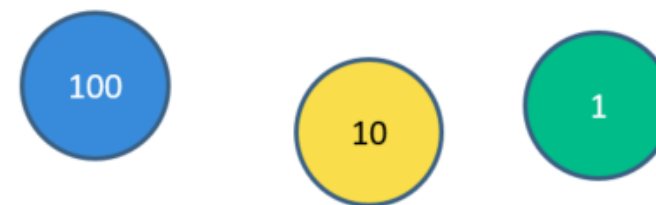
$<$

100s	10s	1s
4 blue circles		4 green circles

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 4:

a) Using place value counters, how many ways can you make 360?



b) Alex says, "The number shown by the place value table below is the greatest amount you can make using five counters."

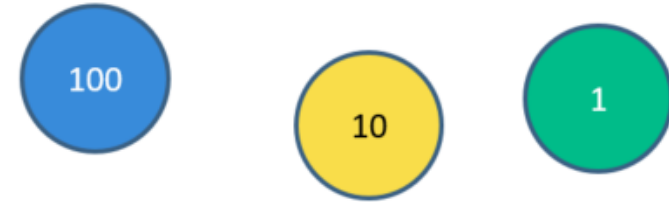
Do you agree? **Answer. Prove. Explain.**

100s	10s	1s

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Activity 4:

a) Using place value counters, how many ways can you make 360?



Open ended task, check with partner/adult/teacher.

b) Alex says, “The number shown by the place value table below is the greatest amount you can make using five counters.”

Do you agree? **Answer. Prove. Explain.**

100s	10s	1s

He is wrong! 500 is the greatest amount possible.

To be able to represent values in the 100s, 10s and 1s columns using place value counters

Evaluation:

John says, "The place value grid shows 153."

Hannah says, "The place value grid shows 351."

Who do you agree with, John or Hannah? Why?

Hundreds	Tens	Ones
		

Answer. Prove. Explain.

Check your answer with your table partner.

Success Criteria

- I can use place value counters to represent different three digit numbers
- I can explain the value of a three digit number


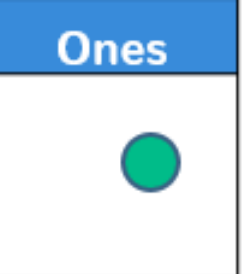
To be able to represent values in the 100s, 10s and 1s columns using place value counters

Evaluation:

John says, "The place value grid shows 153."

Hannah says, "The place value grid shows 351."

Who do you agree with, John or Hannah? Why?

Hundreds	Tens	Ones
		

Success Criteria

- I can use place value counters to represent different three digit numbers
- I can explain the value of a three digit number

Hannah is correct, there are three counters in the hundreds column, five counters in the tens column and one counter in the ones column making 351. John is incorrect as he has confused the hundreds and ones columns.