

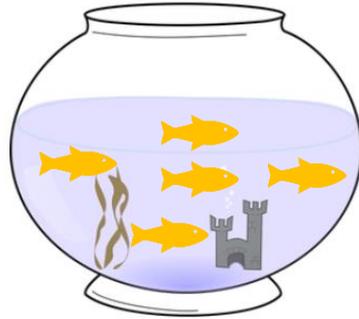
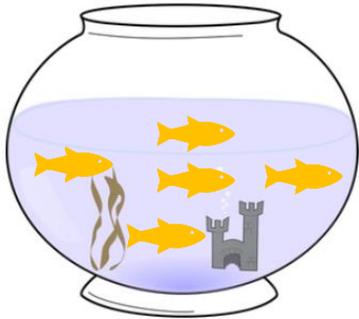
To make arrays

- I can create arrays by making equal groups using columns and rows
- I can change any arrays that have not been built correctly
- I can solve problems using arrays with real objects and pictures

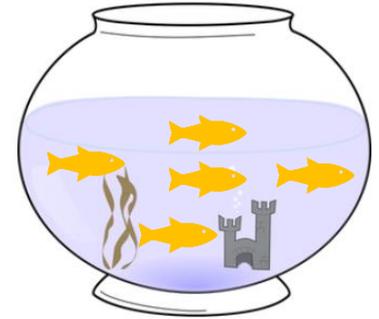
Starter:

Can you explain what is missing from the picture and the number sentences below?

Can you fill in the gaps?



?



$$\underline{5} + \underline{\quad} + \underline{\quad} + \underline{5} = \underline{20}$$

There are fish.

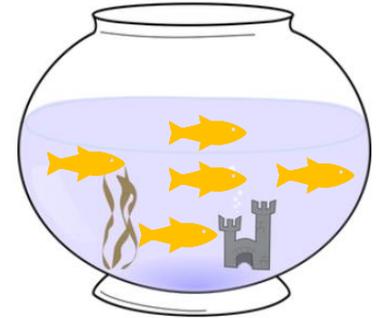
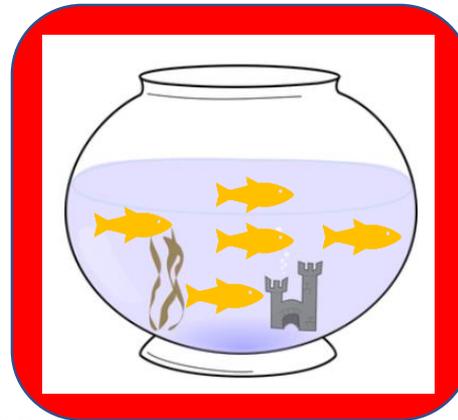
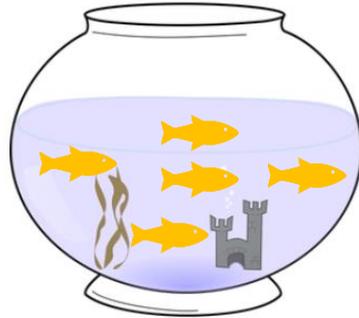
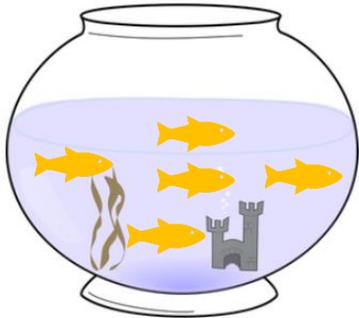
To make arrays

- I can create arrays by making equal groups using columns and rows
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- I can solve problems using arrays with real objects and pictures

Starter:

Can you explain what is missing from the picture and the number sentences below?

Can you fill in the gaps?



$$\underline{5} + \underline{5} + \underline{5} + \underline{5} = \underline{20}$$

There are 20 fish.

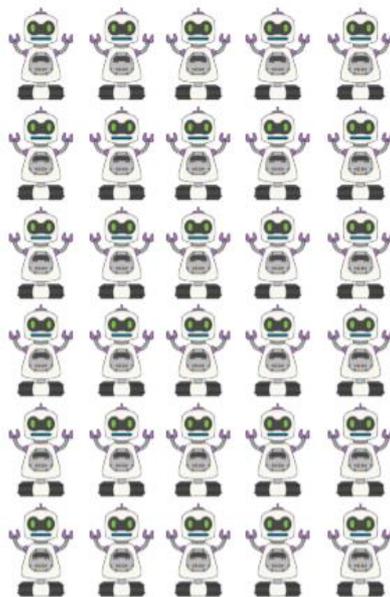
To make arrays

Talking Time:

What are arrays?

Arrays are pictures that help us to see numbers in rows and columns.

Columns go down

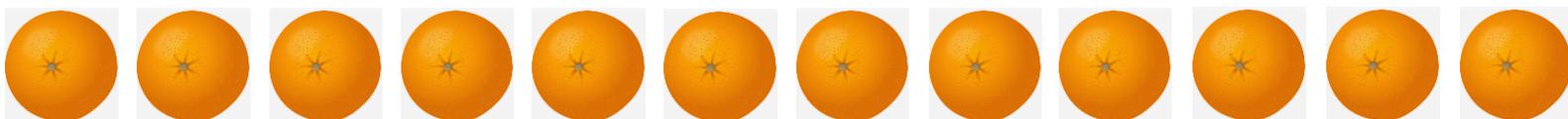


Rows go across

To make arrays

Talking Time:

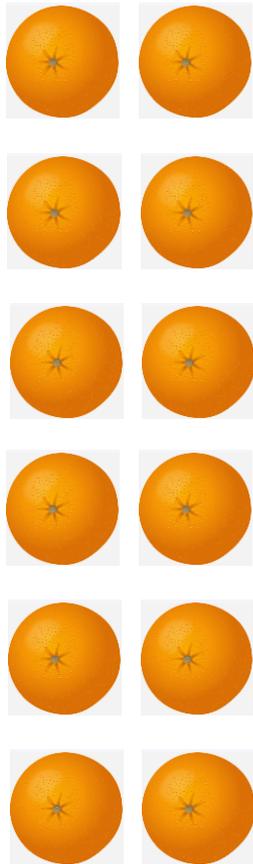
Can you move the oranges so that you make an **array** with **6 rows** of **2** oranges in each row?



To make arrays

Talking Time:

Can you complete the sentences about the array?



There are 2 oranges in each row.

There are 6 rows.

$$\underline{2} + \underline{2} + \underline{2} + \underline{2} + \underline{2} + \underline{2} = \underline{12}$$

There are 12 oranges altogether.

To make arrays

Talking Time:

Can you move the beach balls so that you make an **array** with **3 rows** of **10** beach balls in each row? Can you complete the sentences about the array?



There are _____ beach balls in each row.

There are _____ rows.

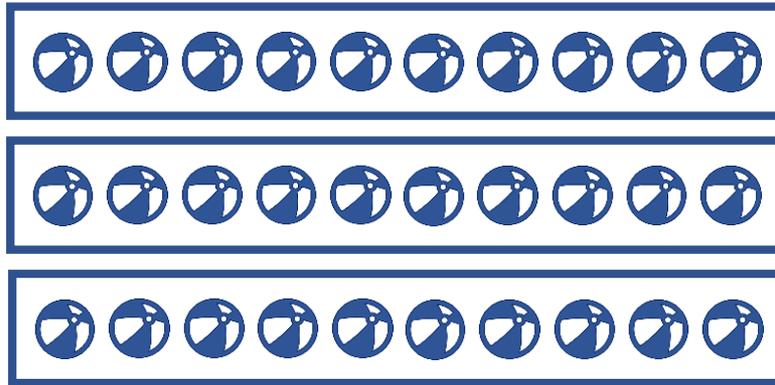
___ + ___ + ___ = _____

There are _____ beach balls altogether.

To make arrays

Talking Time:

Can you move the beach balls so that you make an **array** with **3 rows** of **10** beach balls in each row? Can you complete the sentences about the array?



We could also say
 $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$
 $+ 3 + 3 = 30$

There are **10** beach balls in each row.

There are **3** rows.

$$\underline{10} + \underline{10} + \underline{10} = \underline{30}$$

There are **30** beach balls altogether.

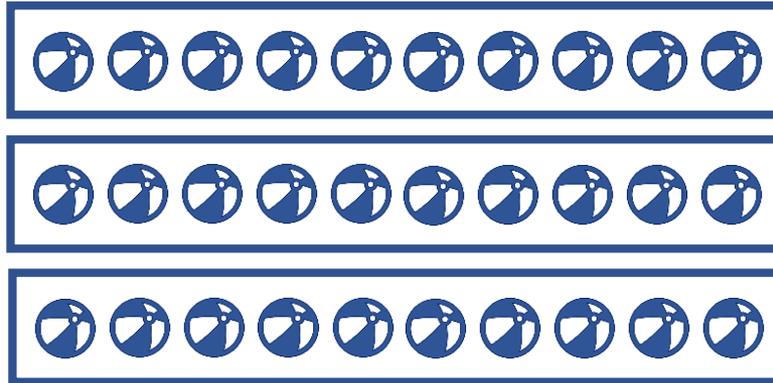
To make arrays

Talking Time:

Can you build an array with counters to match the beach balls?

How many rows have you made?

How many columns have you made?



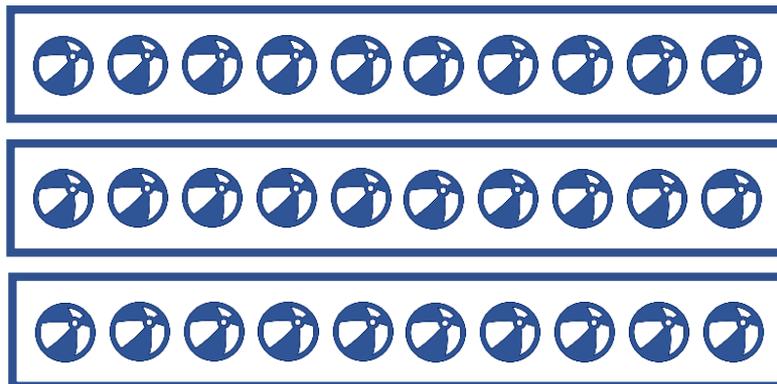
To make arrays

Talking Time:

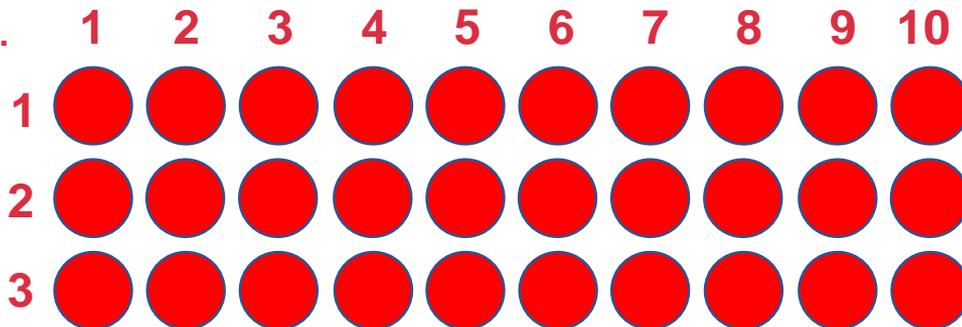
Can you build an array with counters to represent the beach balls? ●

How many rows have you made?

How many columns have you made?



There are 3 rows.

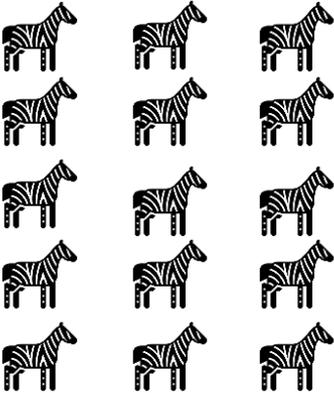


There are 10 columns.

To make arrays

Talking Time:

Can you use the picture of the array to fill in the gaps in the table?

array	columns	rows	number sentences
	<p>There are ___ columns.</p> <p>There are ___ zebras in each column.</p>	<p>There are ___ rows.</p> <p>There are ___ zebras in each row.</p>	<p>$5 + 5 + 5 = \underline{\quad}$</p> <p>or</p> <p>$\underline{3} + \underline{3} + \underline{3} + \underline{3} + \underline{3}$ $= \underline{15}$</p>

To make arrays

Talking Time:

Can you use the picture of the array to complete the table?

array	columns	rows	number sentences
	<p>There are ___ columns.</p> <p>There are ___ shells in each column.</p>	<p>There are ___ rows.</p> <p>There are ___ shells in each row.</p>	<p><u>8</u> + <u>8</u> = <u>16</u></p> <p>or</p> <p><u>2</u> + <u>2</u> + <u>2</u> + <u>2</u> + <u>2</u> + <u>2</u> + <u>2</u> + <u>2</u> = <u>16</u></p>

To make arrays

Activity 3:

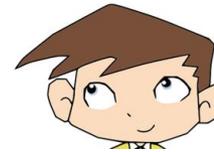
Ollie and Jenson are making the same array for $5 + 5 + 5 + 5 + 5 = 25$.

Do the arrays match?

How do you know?



Jenson



Ollie



To make arrays

Activity 3:

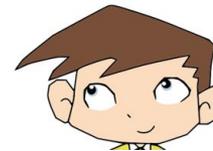
Ollie and Jenson are making the same array for $5 + 5 + 5 + 5 + 5 = 25$.

Do the arrays match?

How do you know?



Jenson



Ollie

Ollie's array is not
 $5 + 5 + 5 + 5 + 5$.
He has a row with
an extra star!

The arrays do not match.



Jenson's array is
 $5 + 5 + 5 + 5 + 5$.



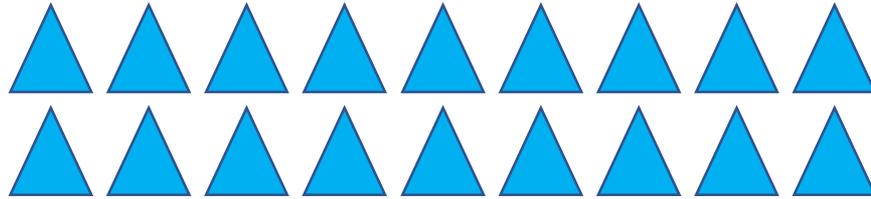
To make arrays

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Evaluation:

Aisha and Evie are talking about the same array. Who is right?

Can you explain why?



This shows $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$
 $= 18$



Aisha

This shows $9 + 9$
 $= 18$



Evie

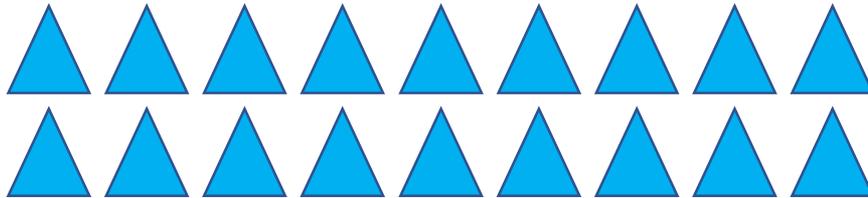
To make arrays

- I can create arrays by making equal groups using columns and rows
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Evaluation:

Aisha and Evie are talking about the same array. Who is right?

Can you explain why?



They are both right.

This shows $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$
 $= 18$



Aisha

Aisha has counted the columns.

This shows $9 + 9$
 $= 18$



Evie

Evie has counted the rows.