

How to use these slides to help your child:

1. **Recall:** Help your child to read what the question is and then leave them to try and answer the question by themselves. Recall is helpful to find out what you child already knows/ can already do so you know how much support to give them.
2. **Learning objective:** Read the learning objective together and discuss the learning habits you might need to use throughout. (discipline, resilience, imagination, collaboration, curiosity).
3. **Guided practice:** These are problems that should be done together. Guide the children to help them to find answers by showing them the most effective way to work things out. Perhaps show them how to work the first one out, work the second one out together and finally let your child work the last guided practice question out. If they get stuck, go back to the first one and work it out together again.

4. Intelligent practice: These are worksheet questions that the children should be able to work out by themselves after going through the guided practice. If they need support or a reminder or how to do it then that's absolutely fine but try not to just give them the answers. Remember- mistakes are good because we learn from them.

5. Dive deeper: This is a question that might be more open ended. It might require an explanation of how they know they are correct. This could be done by proving their answer through showing their working out. Read this question with your child and talk about how best to answer it.

6. Answers: Its really important to go through the answers with your child. Give them a pen and let them tick their answers. If they get an answer wrong, now is the opportunity to look at the correct answer and identify together where they went wrong and how to fix it.

Recall

Can you put these items into an array?



Challenge: describe the array. How many in each row? How many in each column? Can you write a calculation for the array?

What are we learning?

L.O. To understand what an array is and how they help us.

How will we learn it?

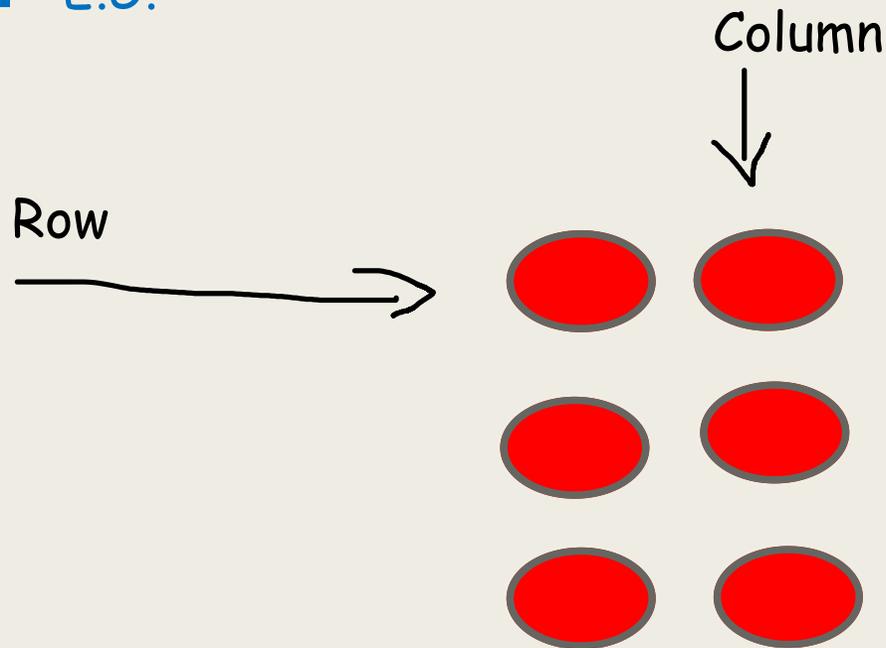
By looking at the rows and columns of an array and finding the calculation.

Learning habits: Resilience and discipline.

Guided practice: Recap

What is an array?

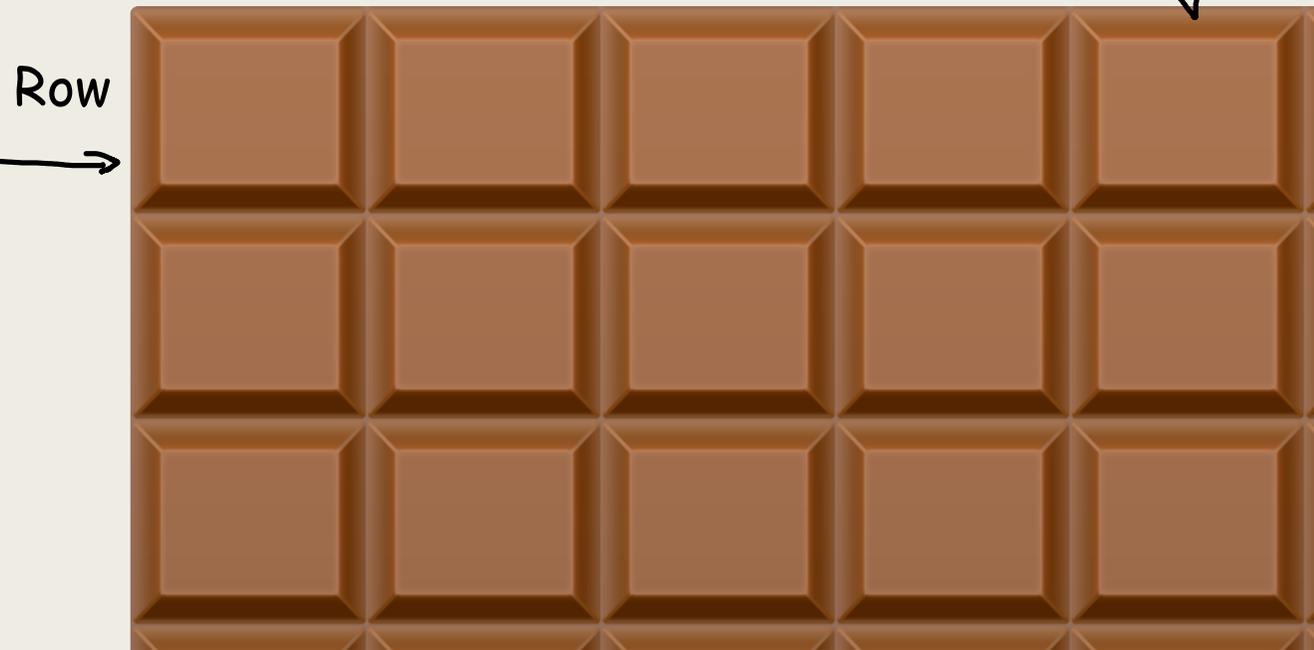
- Arrays are when we take our equal groups and put them in columns and rows.
- This makes it easier to see our groups and understand what our multiplication would be.
- It is a lot clearer.
- E.G.



This array shows 3 rows with 2 in each row. So there are 3 groups of 2 or 3×2 .

This array also shows 2 columns with 3 in each column. So there are 2 groups of 3 or 2×3 .

Guided practice



Arrays can be seen in everyday life, just like this chocolate bar!

Can you answer the following questions about it?

There are _____ chocolate squares in each row.

There are _____ rows.

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

There are _____ squares altogether.

There are _____ chocolate squares in each column.

There are _____ columns.

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

There are _____ squares altogether.

Guided practice



Arrays can be seen in everyday life, just like this chocolate bar!

Can you answer the following questions about it?

There are 5 chocolate squares in each row.

There are 3 rows.

$$5 \times 3 = 15$$

There are 15 squares altogether.

There are 3 chocolate squares in each column.

There are 5 columns.

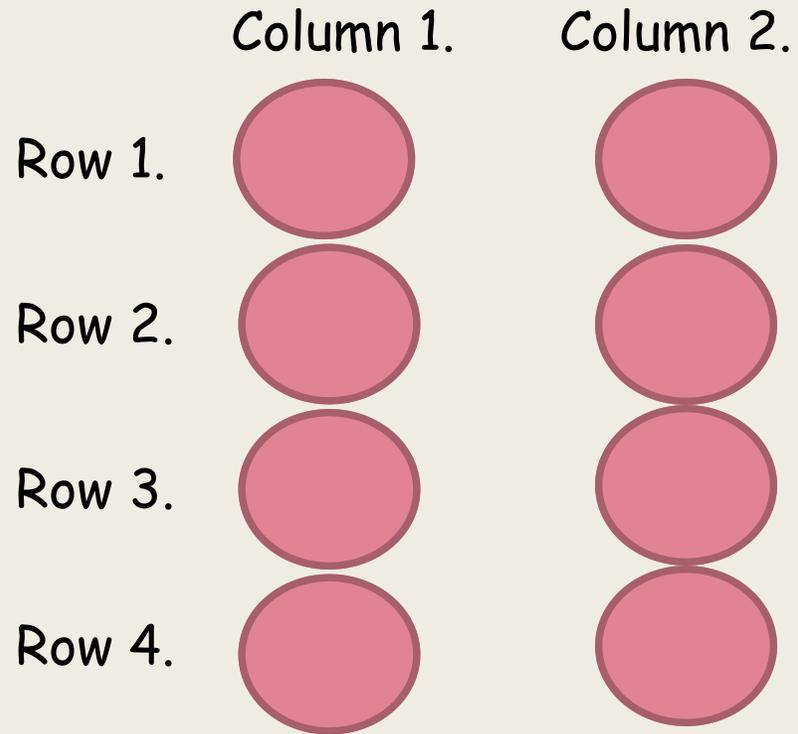
$$3 \times 5 = 15$$

There are 15 squares altogether.

Challenge: Can you draw an array that shows 4 rows and 2 columns?

Can you label which one is the column and which one is the row?

Challenge: Can you draw an array that shows 4 rows and 2 columns?

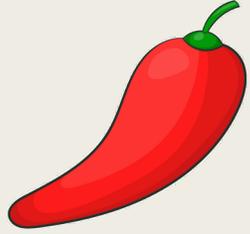


Can you label which one is the column and which one is the row?

Intelligent practice:

Write the following as calculations:

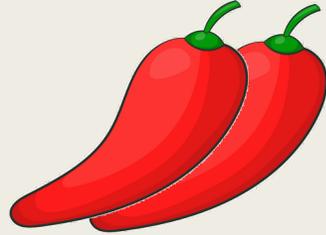
The first one has been done for you.



2 groups of 2 = 2×2

4 groups of 2 = _____

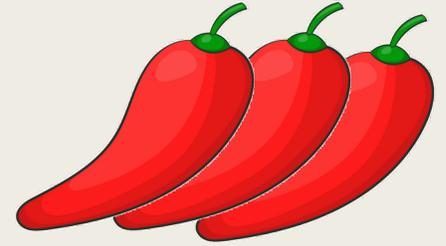
8 groups of 2 = _____



2 groups of 5 = 2×5

4 groups of 5 = .

8 groups of 5 = .



2 rows and 10 columns = 2×10

5 rows and 10 columns =

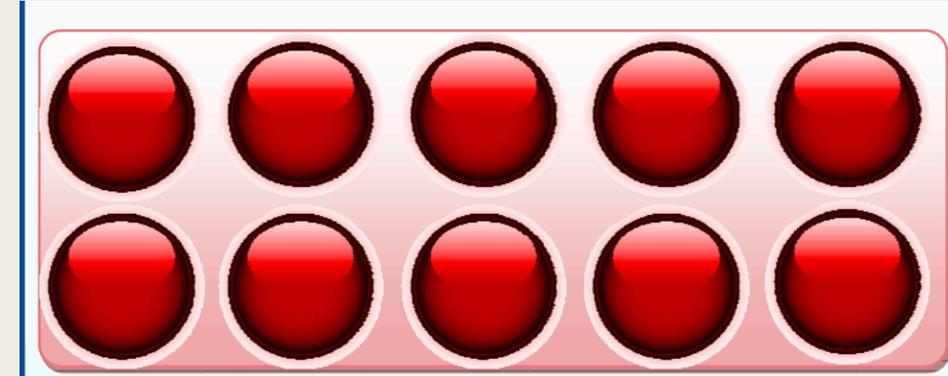
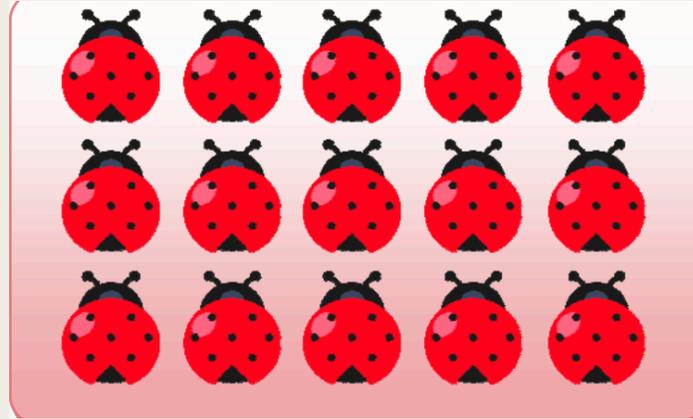
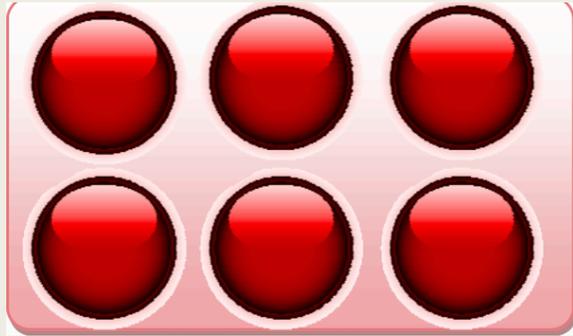
10 rows and 10 columns =

Challenge: Can you write the addition calculation for each sum too?

E.G.

2 groups of 2 = $2 \times 2 = 2 + 2$

Dive deeper 1: Match the array to the sentence.



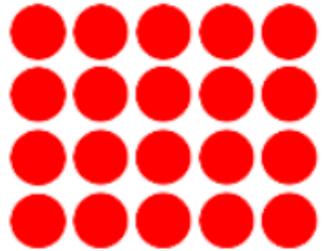
There are 5 in a row.
There are 2 in a column.
There are 10 altogether.

There are 5 in a row.
There are 3 in a column.
There are 15 altogether.

There are 3 in a row.
There are 2 in a column.
There are 6 altogether.

Dive deeper 2:

Teddy and Alex are writing number sentences to describe the array.



Teddy

$$4 + 4 + 4 + 4 + 4 = 20$$

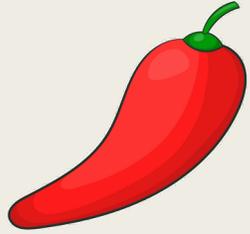


Alex

$$5 + 5 + 5 + 5 = 20$$

Who do you agree with? Explain why.

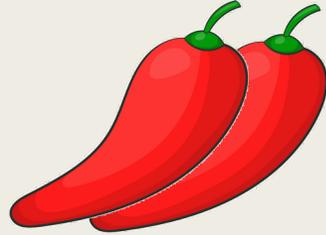
Intelligent practice: answers



2 groups of 2 = 2×2

4 groups of 2 = 4×2

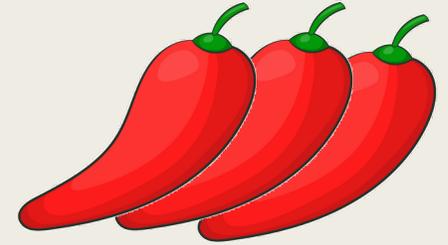
8 groups of 2 = 8×2



2 groups of 5 = 2×5

4 groups of 5 = 4×5

8 groups of 5 = 8×5



2 rows and 10 columns = 2×10

5 rows and 10 columns = 5×10

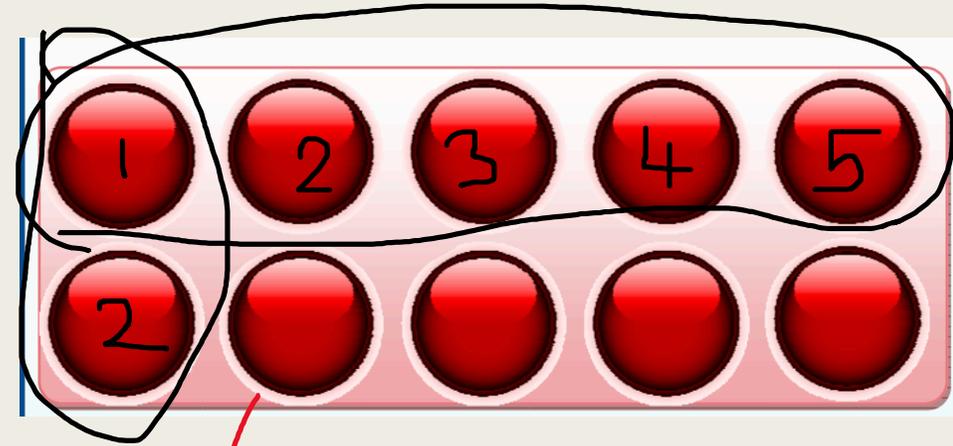
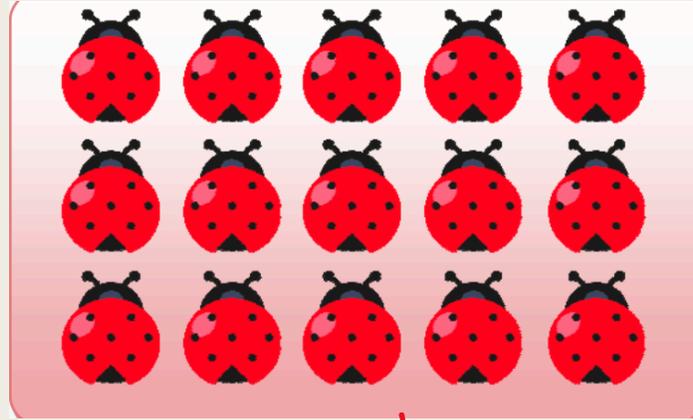
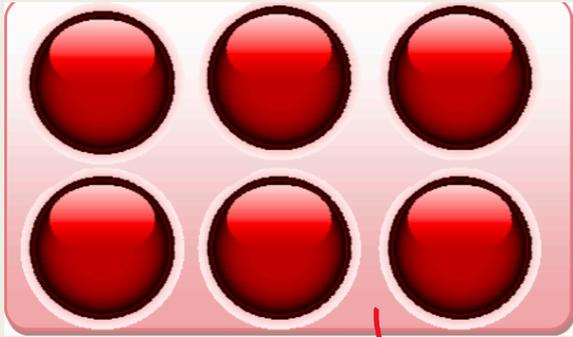
10 rows and 10 columns = 10×10

Challenge: Can you write the addition calculation for each sum too?

E.G.

2 groups of 2 = $2 \times 2 = 2 + 2$

Dive deeper 1: Match the array to the sentence.



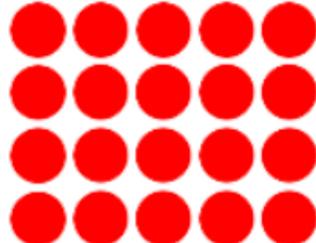
There are 5 in a row.
There are 2 in a column.
There are 10 altogether.

There are 5 in a row.
There are 3 in a column.
There are 15 altogether.

There are 3 in a row.
There are 2 in a column.
There are 6 altogether.

Dive deeper 2:

Teddy and Alex are writing number sentences to describe the array.



Teddy

$4 + 4 + 4 + 4 + 4 = 20$

Alex

$5 + 5 + 5 + 5 = 20$

The image shows a 4x5 array of red dots. To the right of the array are two cartoon characters. The top character, a boy with brown hair and glasses, is labeled 'Teddy' and has a blue speech bubble containing the equation $4 + 4 + 4 + 4 + 4 = 20$. The bottom character, a girl with orange hair in pigtails and glasses, is labeled 'Alex' and has a red speech bubble containing the equation $5 + 5 + 5 + 5 = 20$.

Who do you agree with? Explain why.

They are both correct. There are 4 rows with 5 in each row so Teddy has added 4, 5 times to get $4+4+4+4+4=20$.

There are 5 columns with 4 in each column so Alex has added 5, 4 times to get $5+5+5+5=20$