

# Number Problems

Learning Objective:  
To solve multiplication and division  
problems

# Multiplication arrays

How can we easily solve  $3 \times 5$ ?

$3 \times 5$  is the same as saying:

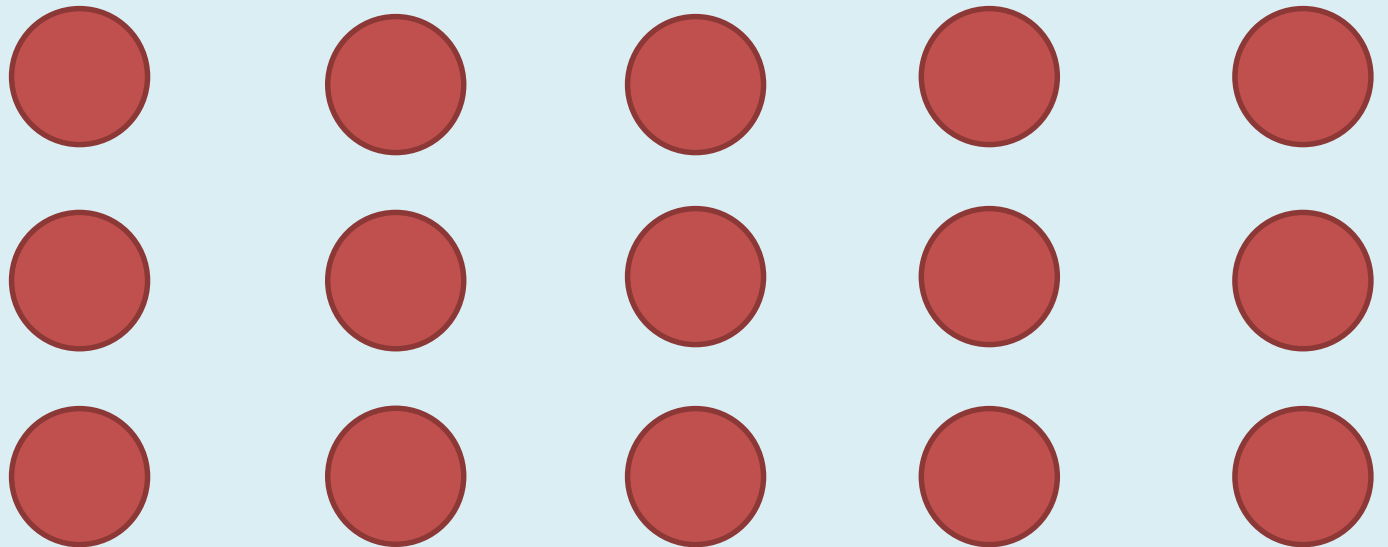
“3 groups of 5”.

If we make the groups, we can easily find the answer.

# Multiplication arrays

Let's make those groups.

Remember, 3 groups of 5; write them on a piece of paper.



# Multiplication arrays

If we rotate the array, is the answer still the same?

Yes!

5 groups of 3 is the same as having 3 groups of 5.

$$5 \times 3 = 15$$

$$3 \times 5 = 15$$

# Division arrays

We can use the array to solve division.

$$15 \div 3 =$$

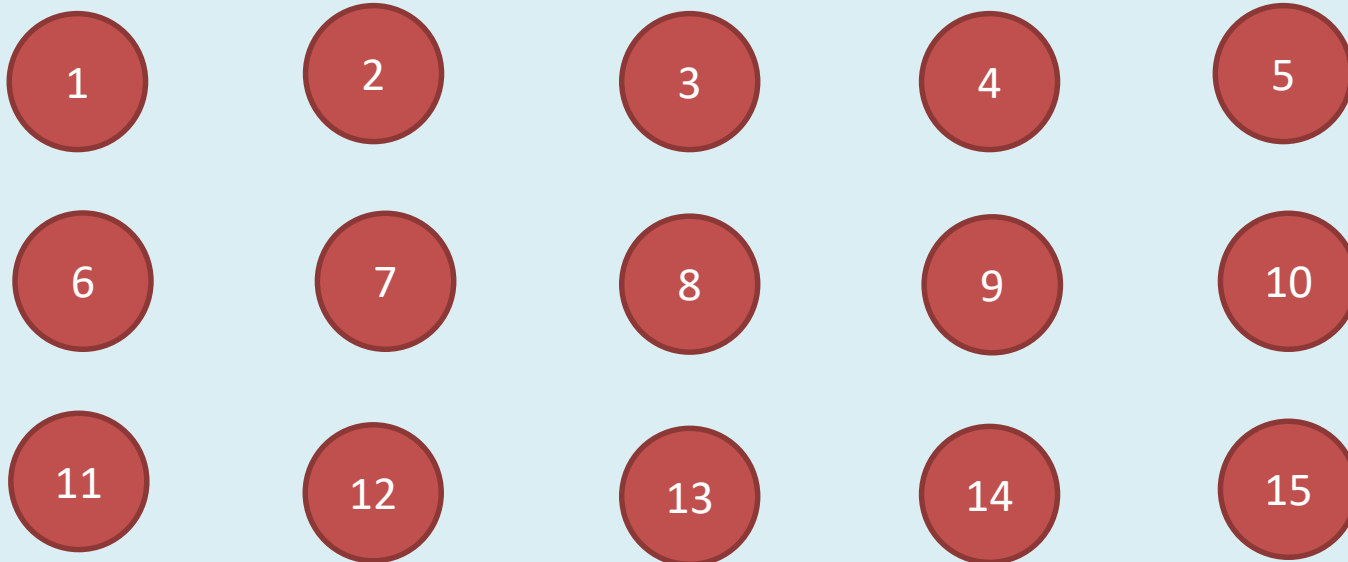


# Division arrays

15 divided into 5 groups makes 5 groups of 3.

$$15 \div 5 = 3$$

Think back to the multiplication sum. Can you see the link?



# Word Problems

Read these word problems. What is the sum you need to do?

1. There are 30 cakes and 10 people at a party.  
How many cakes can each person eat?



2. There are 5 year groups in a school. Each year group has 6 teachers. How many teachers are there altogether?

Task: Now use your knowledge of the 2, 5 and 10 times tables to complete the multiplication and division calculations in the 'number problems' activity.

Remember – always perform a quick check with the inverse!