Multiply by 8

L3	WALT: I can multiply by 8 and find related division facts	
	I can say the 8 times table up to 12 X 8 quickly I can find related division facts	
	I can say the 8 times table up to 12 X 8 I can find related division facts	
	I can say the 8 times tables up to 12 x 8 with support and resources	
Nasty Maths	On print out	

Nasty Maths

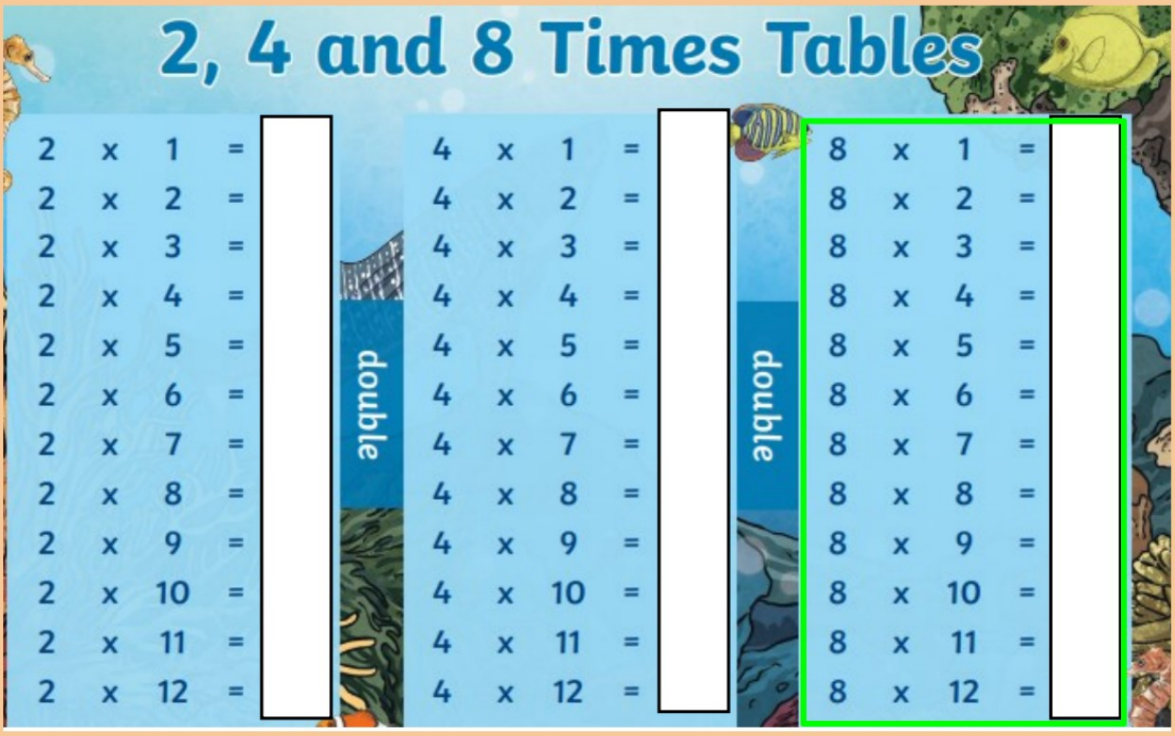
X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Step 1 – Complete the blank boxes on the grid. Write your time here: _____

Step 2 – List as many related division facts as possible in the space on this sheet.

8 X table

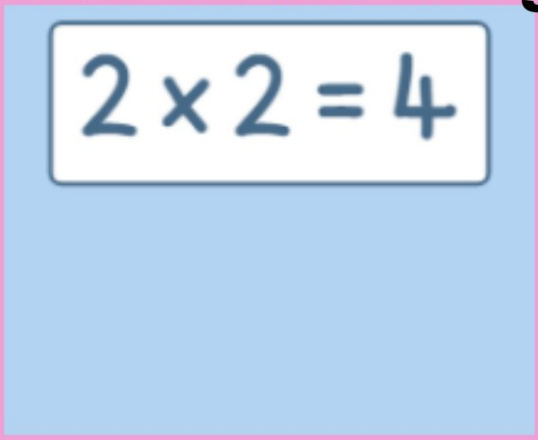
Fill out the 8 x table



Double the 4 x table to find the 8 x tabl

We will look at arrays of the 8 x table

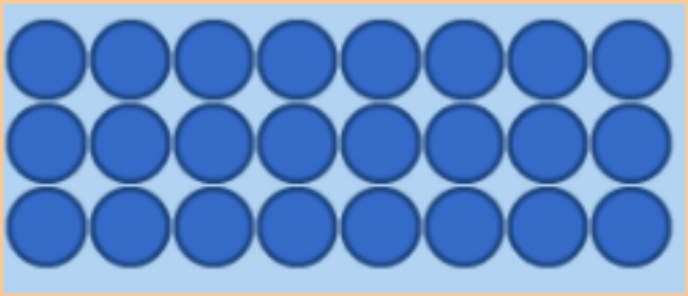
Click on the image

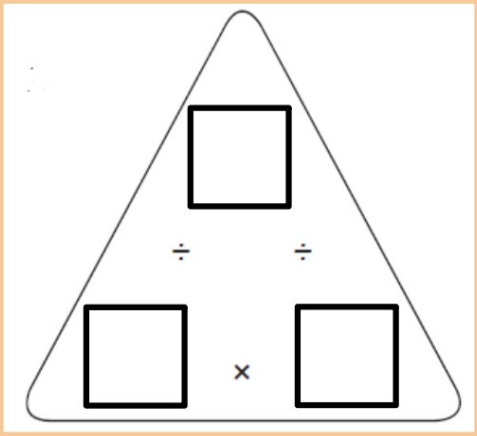


Can you find the division facts?

I do

What multiplication facts can you see?

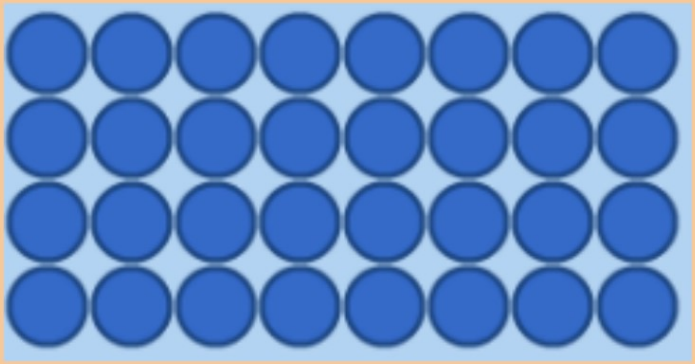


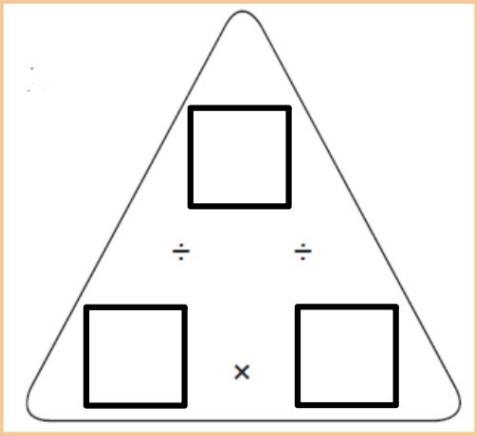


What division facts can you see?

We do

What multiplication facts can you see?

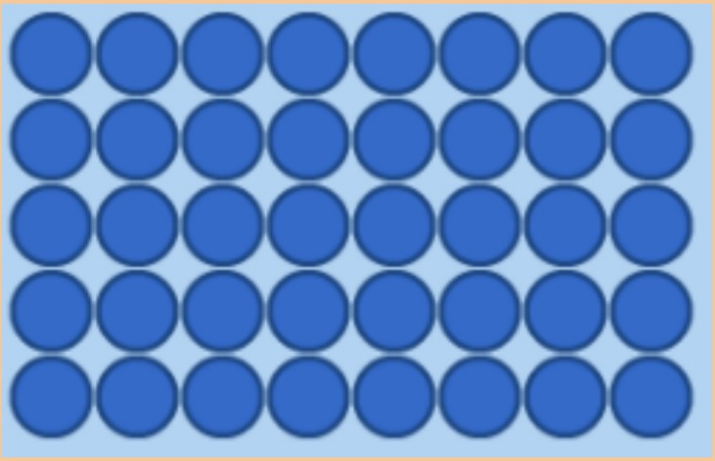


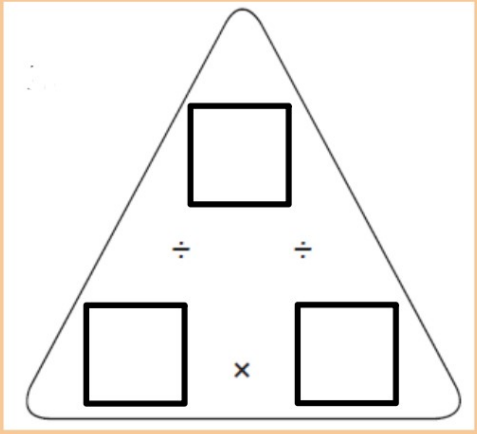


What division facts can you see?

You do

What multiplication facts can you see?





What division facts can you see?

Plenary

True or False.....

A multiple of 8 is always a multiple of 4

A multiple of 8 is always a multiple of 2

A multiple of 4 is always a multiple of 8

L4	WALT: I can multiply by 5 and find related division facts	
	I can say the 5 times table up to 12 X 5 quickly I can find related division facts	
	I can say the 5 times table up to 12 X 5 I can find related division facts	
	I can say the 5 times table up to 12 X 5 with support and using resources	
Nasty Maths		

Nasty Maths

X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Step 1 – Complete the blank boxes on the grid. Write your time here: _____

Step 2 – List as many related division facts as possible in the space on this sheet.

Multiply by 5

5 X table

Sort your cards into.....

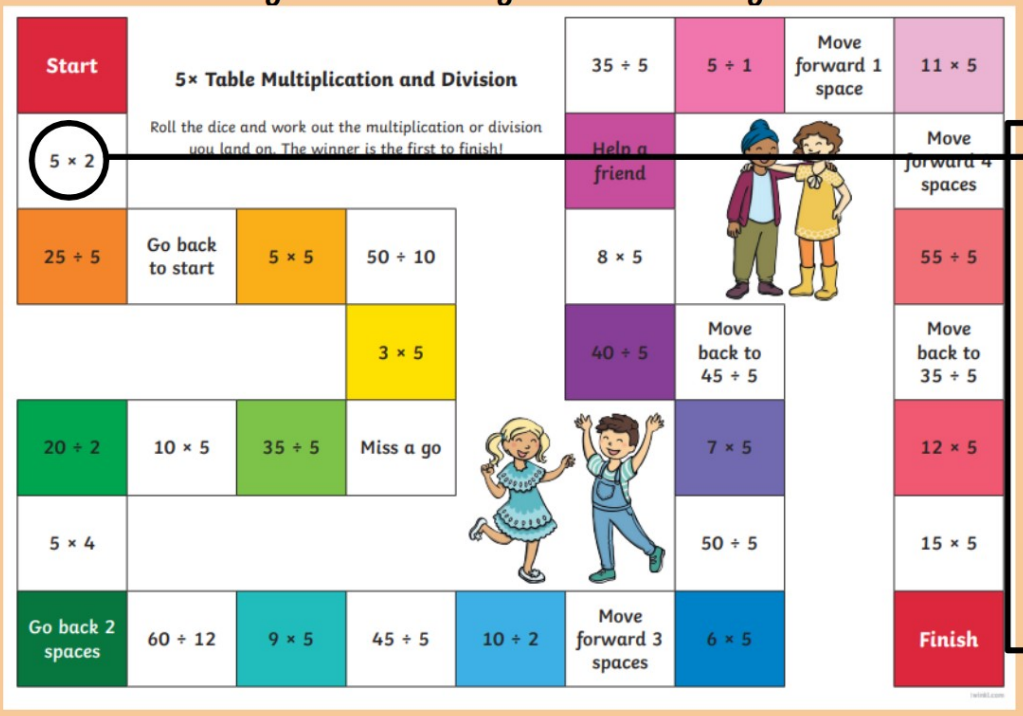
What do you notice?

Multiples of 5	Not multiples of 5

Play with your talk partner

When you land on a square you must write down all the multiplication and division facts.

Prove it by drawing an array.

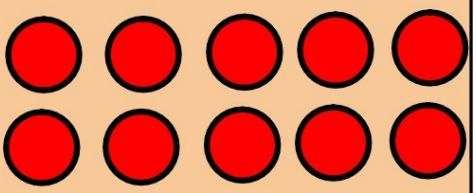


5 X 2 = 10

2 X 5 = 10

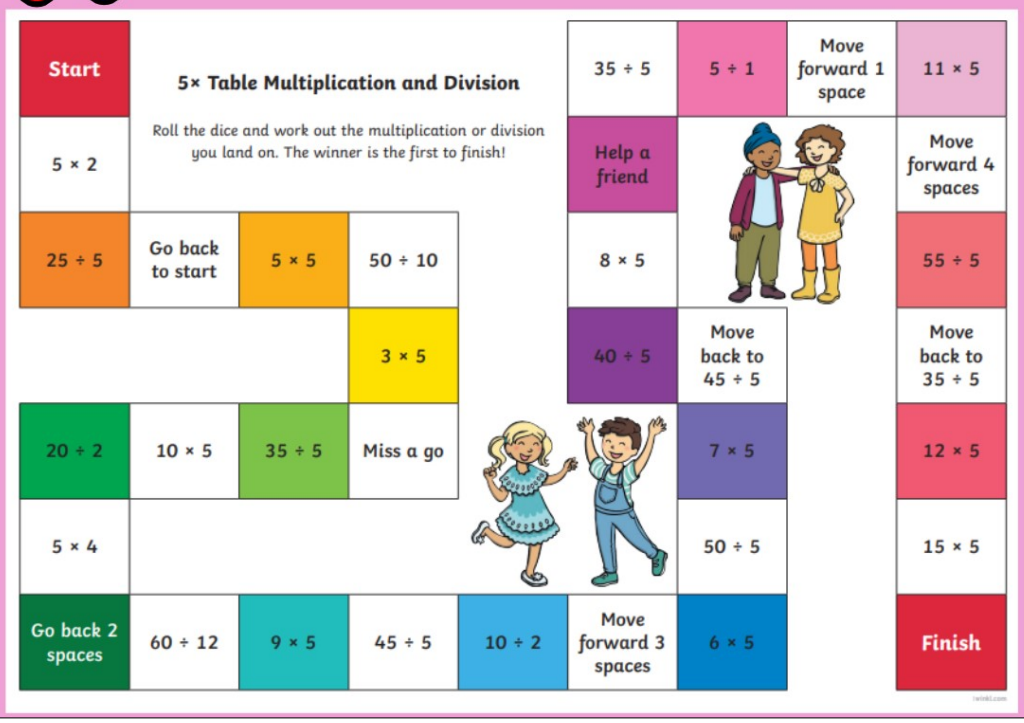
10 5 = 2

10 2 = 5



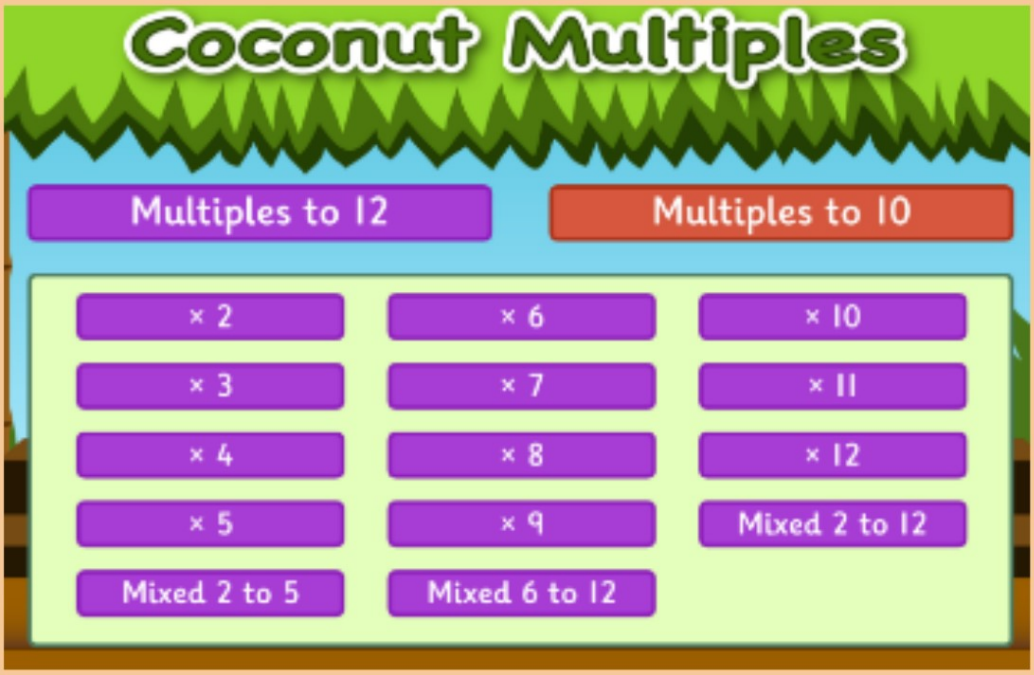
When you have finished the game - move onto reasoning

Play against me before you play with your talk partner



Plenary

Can you spot the multiples of 5?



L5	WALT: I can multiply by 10 and find related division facts	
	I can say the 10 times table up to 12 X 10 quickly I can find related division facts	
	I can say the 10 times table up to 12 X 10 I can find related division facts	
	I can say the 10 times table up to 12 X 10 with support and using resources	
Nasty Maths		

Nasty Maths

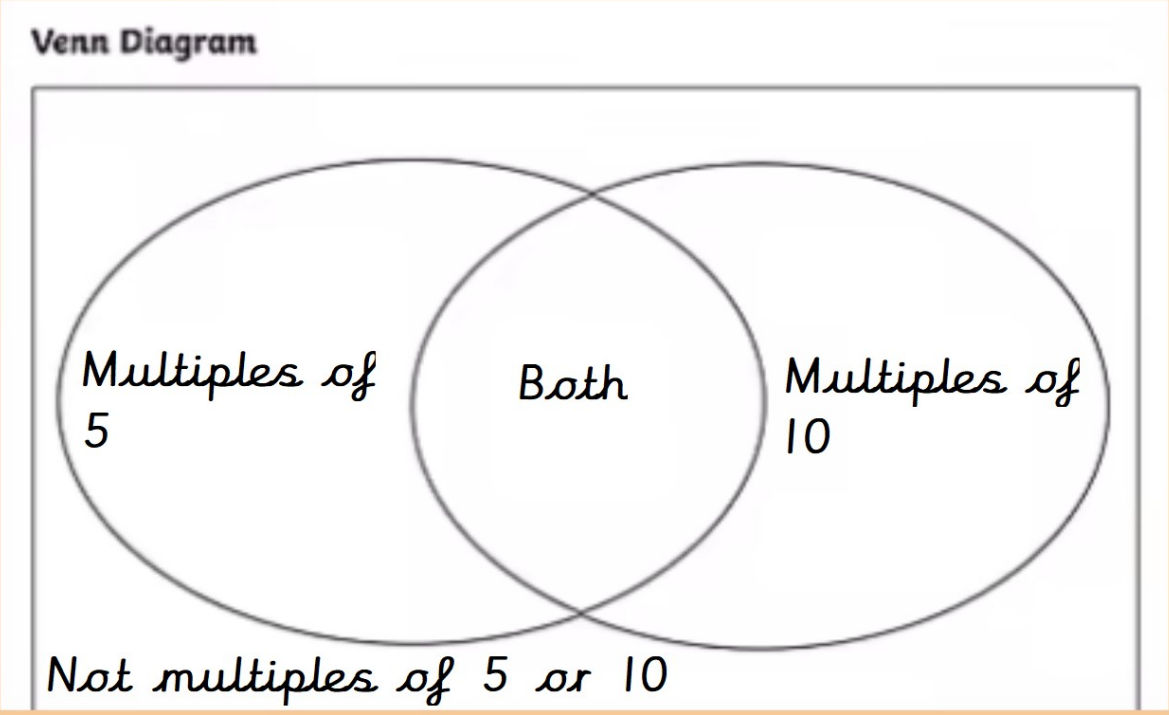
X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Step 1 – Complete the blank boxes on the grid. Write your time here: _____

Step 2 – List as many related division facts as possible in the space on this sheet.

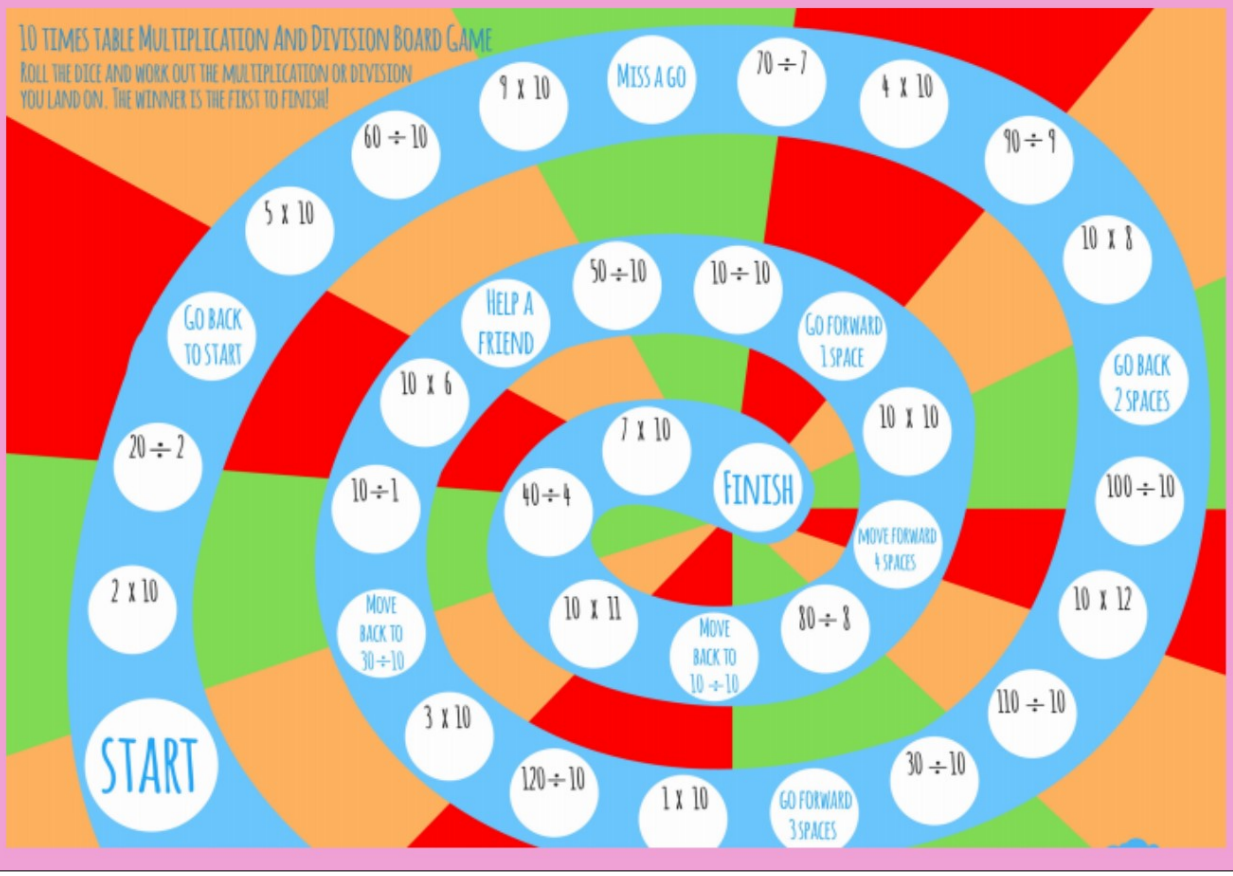
Sort your cards into.....

What do you notice?

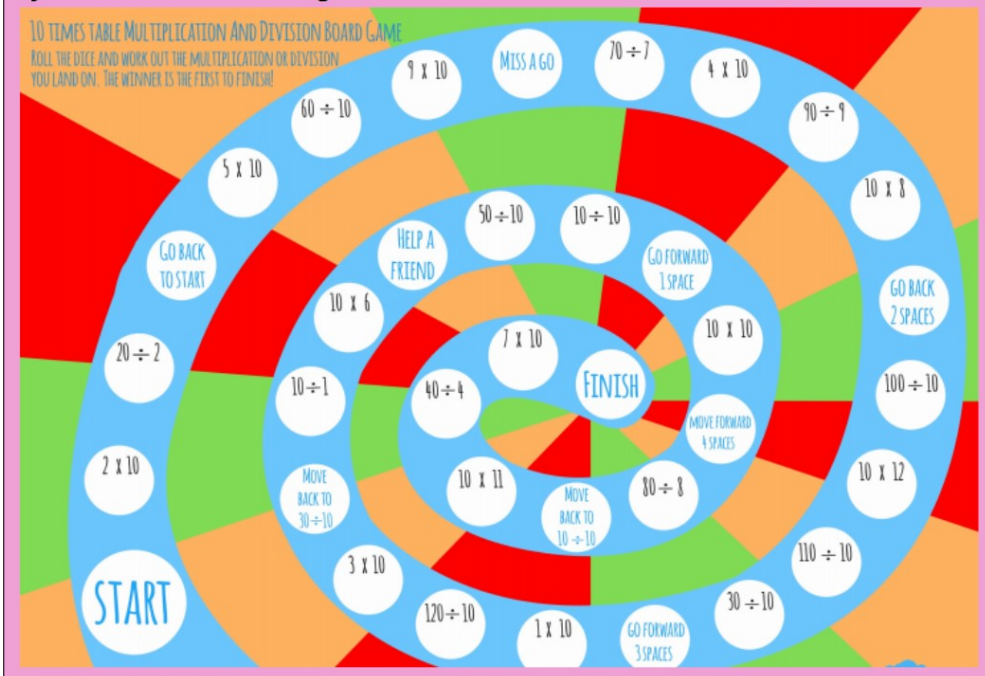


Play the teacher!

When you land on a square you must find all the related facts and show them with an array. First to the end wins!



Now play your talk partner - use arrays or number triangles to show all the multiplication and division facts that you land on.



When you have finished, move onto reasoning.

Plenary

Always, sometimes, never

Multiples of 10 are also multiples of 5

LI	WALT: I can scale up by 10 to find answers to additions	
	I can explain how scaling up can help solve additions	
	I can use scaling up to solve additions that are 10 x bigger	
	I can use ten frames to add 1 and 2-digit numbers	
Nasty Maths		

Challenge

Use the facts that you know to help you work out related facts – the first 2 have been done for you.

If I know...	then I also know...
8 + 6 = 14	80 + 60 = 140
4 + 3 = 7	40 + 30 = 70
1 + 8 =	
6 + 2 =	
7 + 6 =	
4 + 8 =	
9 + 4 =	

What do you notice about the numbers in the left column and the numbers in the right column?

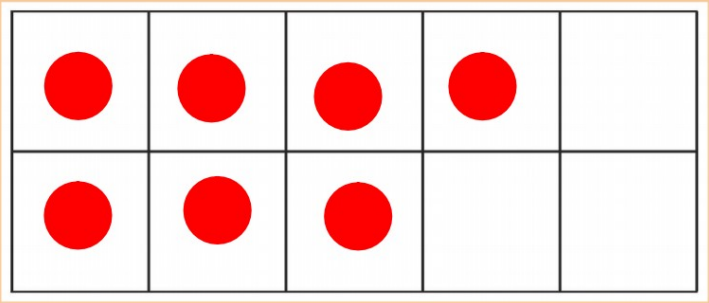
Mega Challenge

A garden table costs £80 and 2 garden chairs each cost £60. How much do the 2 chairs and the table cost altogether?

Which related facts helped you to work out your answer?

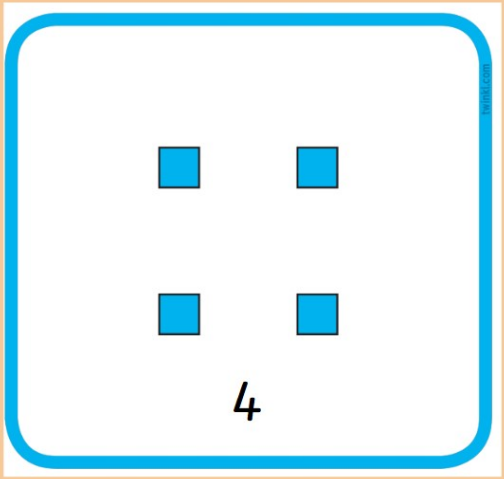
If you finish the mega challenge – choose any number bond to 20 and show me related facts – look at the top 2 rows of the Challenge for ideas!

What number could this ten frame be showing?



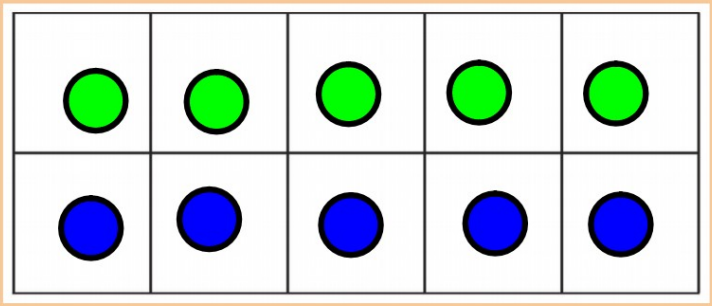
How many tens make 100?

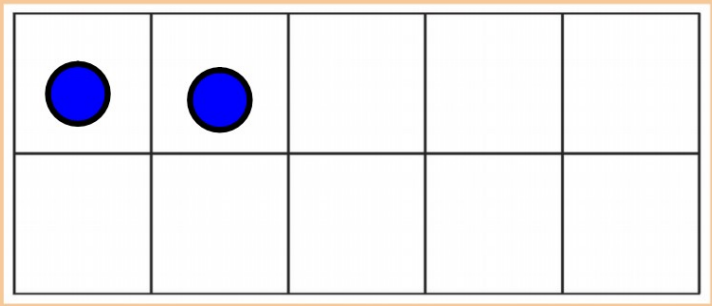
Look at the dienes cards.
Write the number that is shown onto the card.
Now match it to a number that is 10 times bigger.



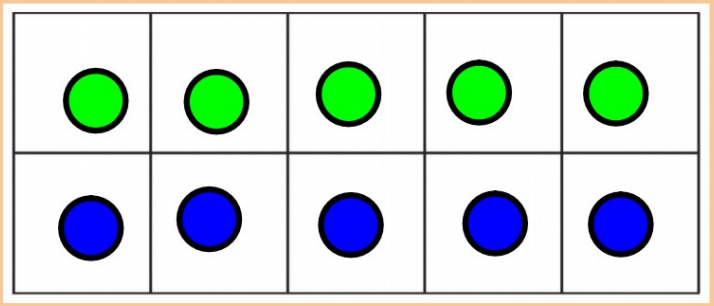
40

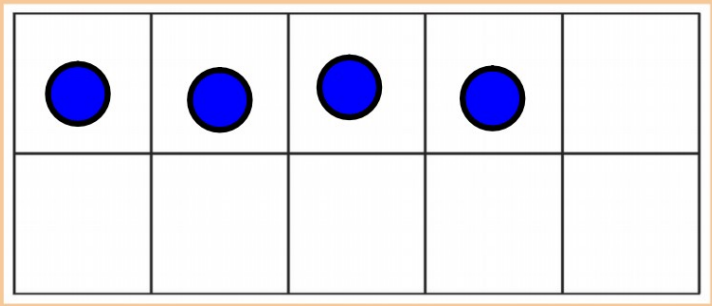
I do 5 + 7 can help me find the answer to 50 + 70



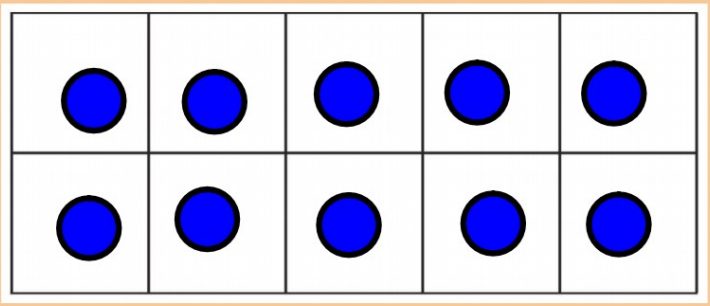


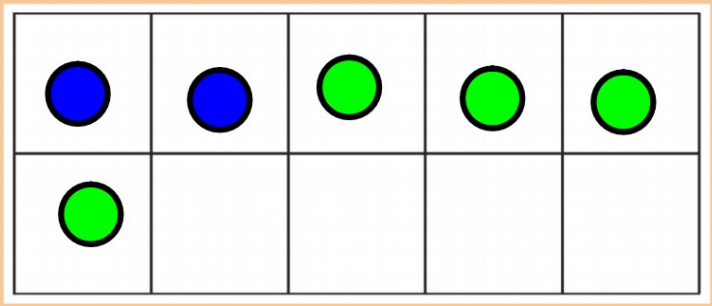
We do 5 + 9 can help me find the answer to 50 + 90





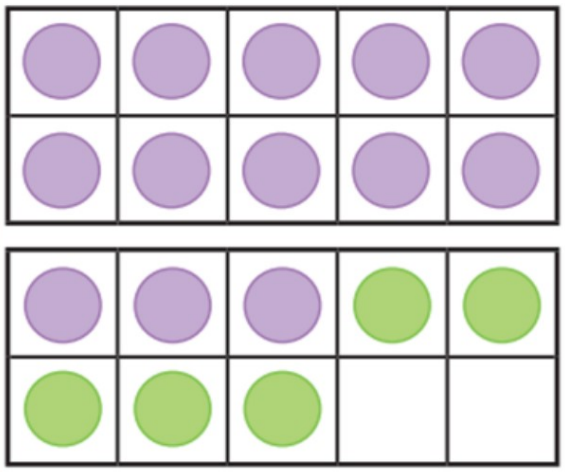
You do 12 + 4 can help me find the answer to 120 + 40





Use ten frames to add 1 digit numbers
Show me how we can use this to find
additions that are 10 times bigger.

Example



13 + 5 = 18

so

130 + 50 = 180

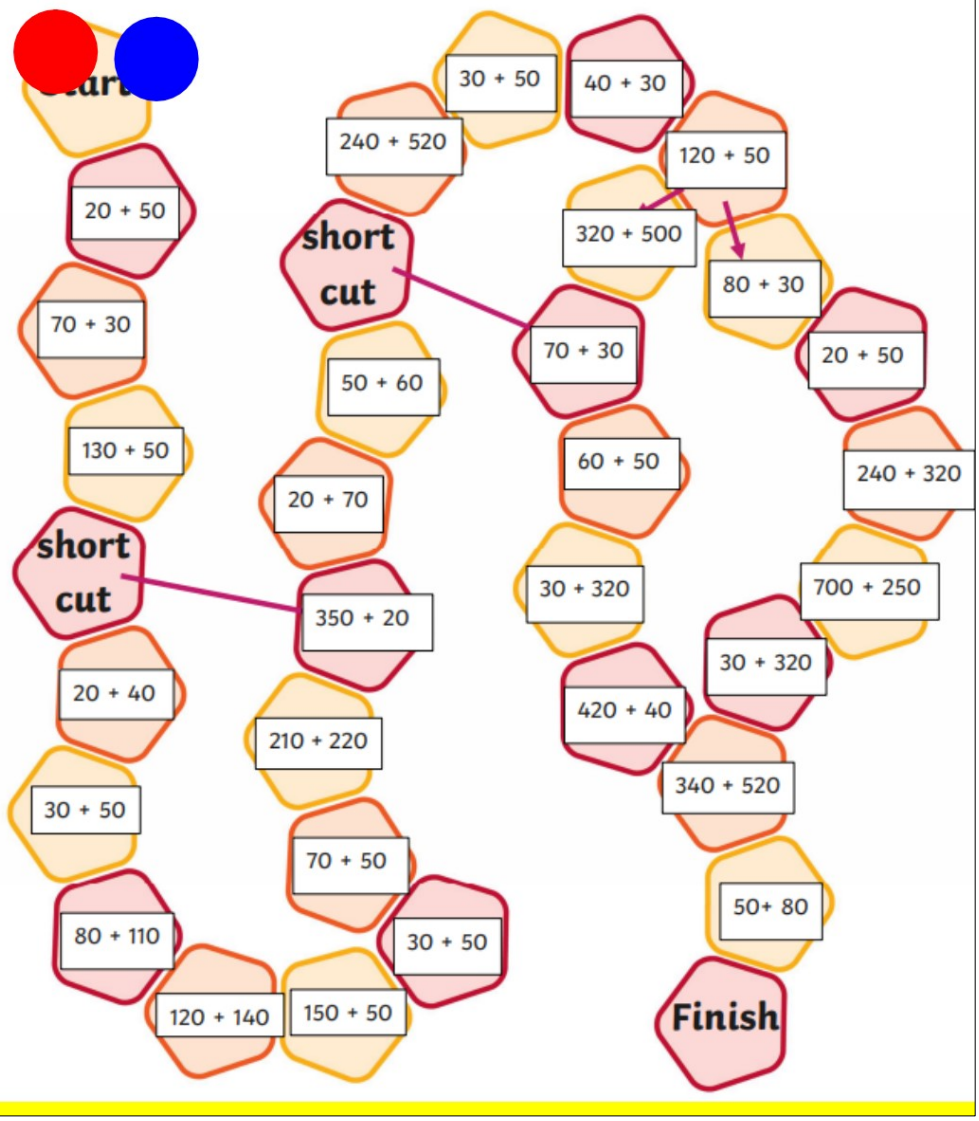
Use the addition grid or dice to make your additions

Plenary

When you land on an addition, tell me the answer

Bonus points for telling me a smaller addition you could use to solve it.

I know that 20 + 30 = 50 because 2 + 3 = 5.



L2	WALT: I can scale up by 10 to find answers to multiplications	
	I can explain how scaling up can help to solve multiplications	
	I can use scaling up to solve multiplications	
	I can make arrays to show multiplications I am learning. I can use dienes to make it 10 X bigger	
Nasty Maths	On print out	

Challenge

Use the facts that you know to help you work out related facts – the first 2 have been done for you.

If I know...	then I also know...	and I also know...
3 X 5 = 15	30 X 5 = 150	3 X 50 = 150
4 X 2 = 8	40 X 2 = 80	4 X 20 = 80
2 X 5 =		
5 X 5 =		
3 X 4 =		
4 X 6 =		
3 X 8 =		

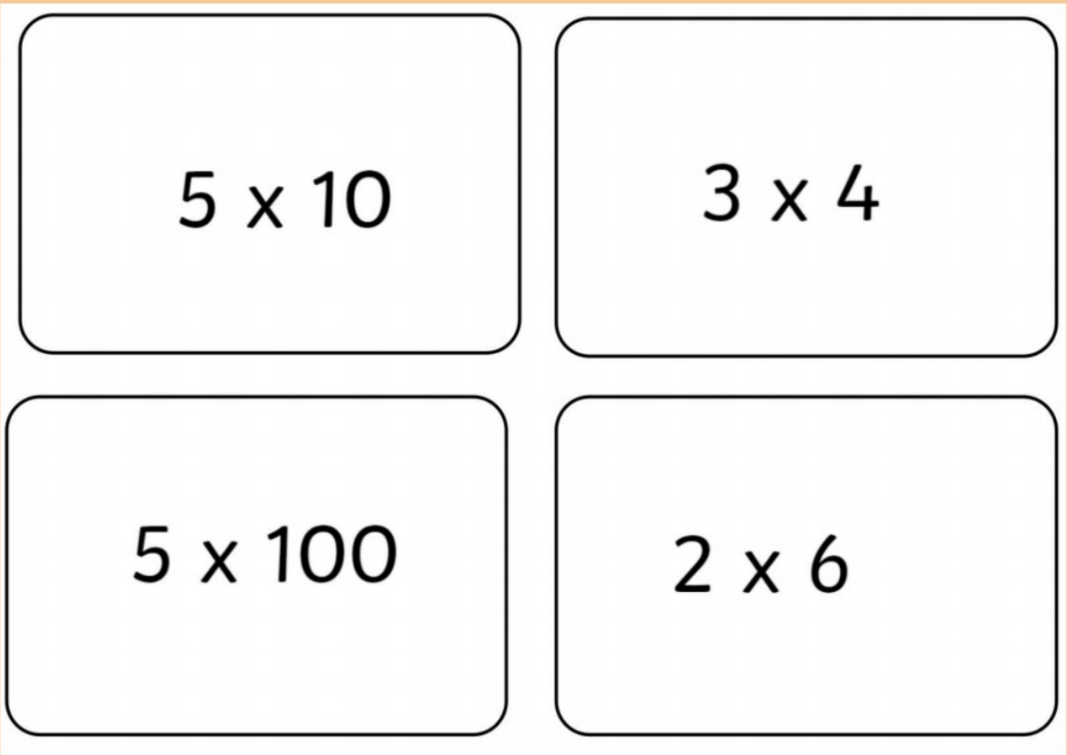
What do you notice about the numbers in the left column and the numbers in the next 2 columns?

Mega Challenge

A family ticket for a safari park is £40. 3 families go together. How much do the 3 family tickets cost altogether? Which related facts helped you to work out your answer?

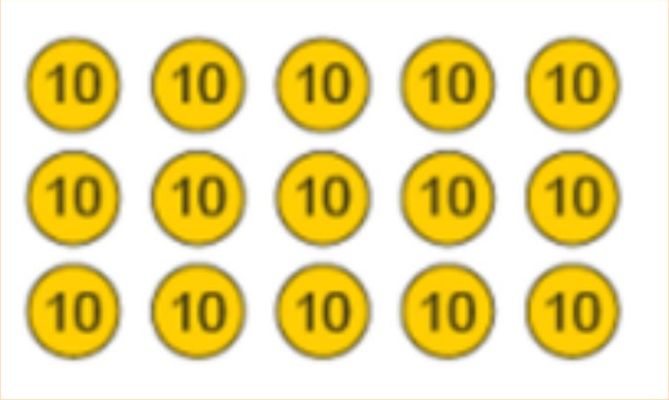
If you finish the mega challenge – choose any multiplication fact up to 12 x 12 and show me related facts – look at the top 2 rows of the Challenge for ideas!

Which multiplication can help me solve this?

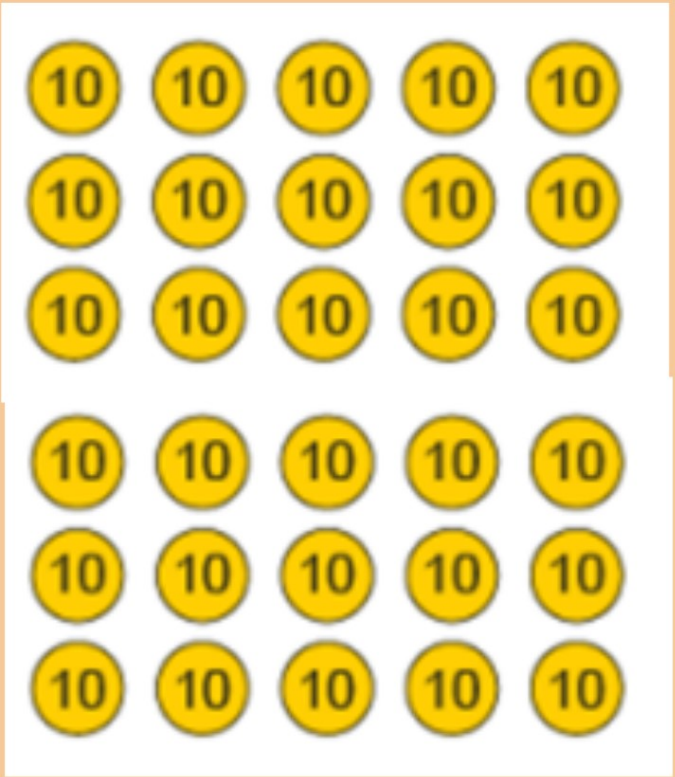


Match up the multiplication cards to one that can help you solve it.

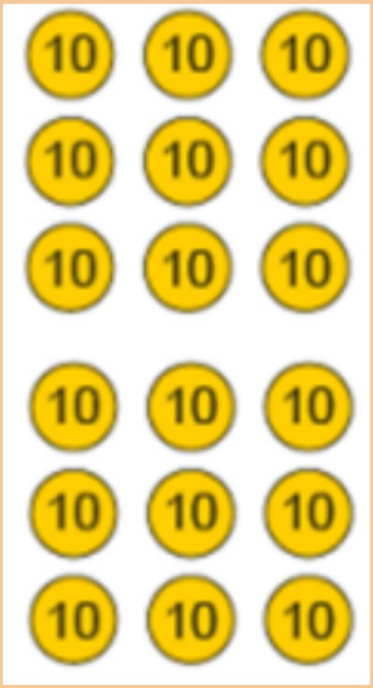
I do - Find a multiplication that can scale up by 10 to help me solve a bigger multiplication



We do - Find a multiplication that can scale up by 10 to help me solve a bigger multiplication



You do - Find a multiplication that can scale up by 10 to help me solve a bigger multiplication



Use ten counters to show the multiplication and division facts.

Use 10 counters to build an array for these multiplications

Draw the array into your book. Tell me a multiplication fact that could help you answer it.

Example:

70 x 5= 350

I could use 7 x 5 and make it 10 times bigger. There are 5 groups of 70 in 350.

Plenary

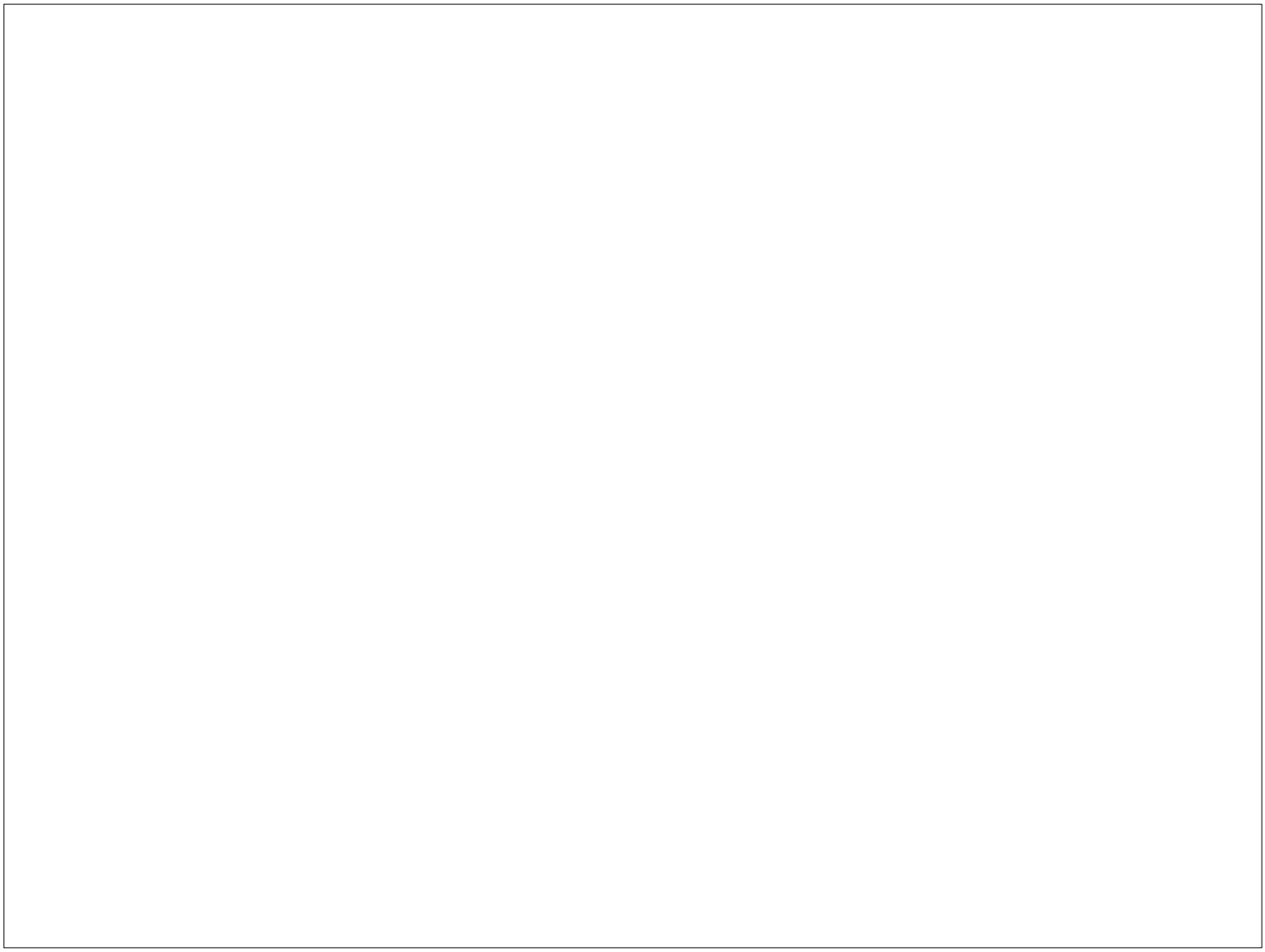
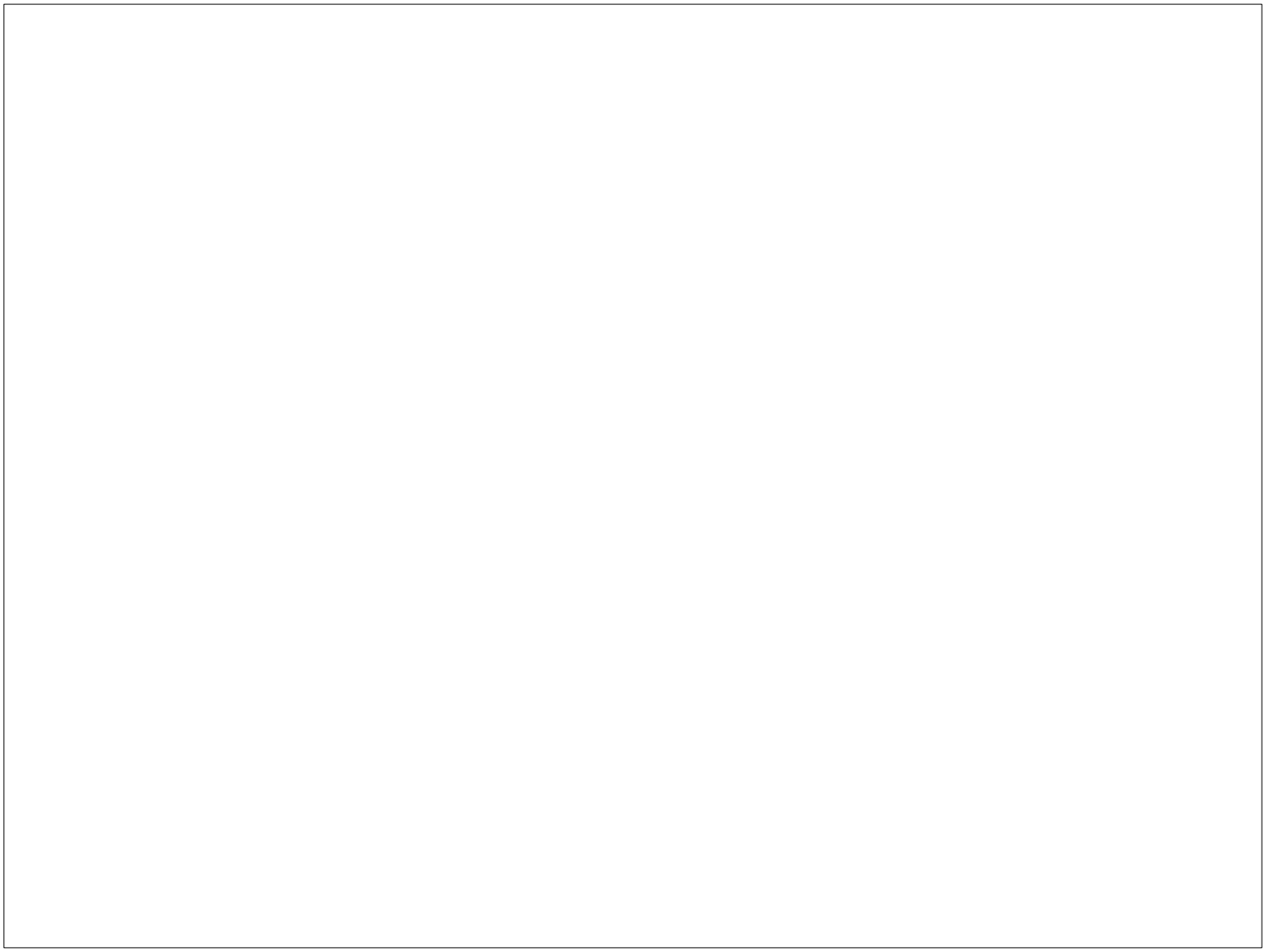
True or False?

20 X 3 = 60

30 X 3 = 9

60 X 6 = 350

30 X 4 = 120

50 X 5 = 205

5 X 9 = 450