

MULTIPLICATION

FACT FLUENCY

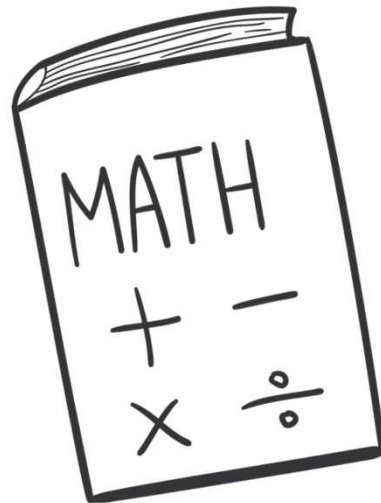
EXPLORE THE 2s TIMES TABLE

LESSON 2

TODAY'S OBJECTIVE

Today we will explore the
2s times table.

TAKE OUT YOUR **MATH JOURNALS**

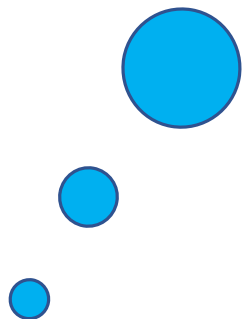




WATCH ME FIRST



Today I want to share a story with you. I want you to try to imagine it.



One day my friend found a magic bookbag.

Every time she placed something in it, she would pull twice as much out.

Discuss with your neighbor what the word twice means.



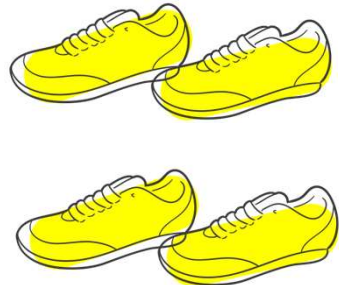
The first day she placed one pencil in her bookbag and pulled out two pencils.

That's 2 groups of 1 which equals 2.



The next day she placed two sneakers into the magic bookbag.

Later that day she pulled out four sneakers.

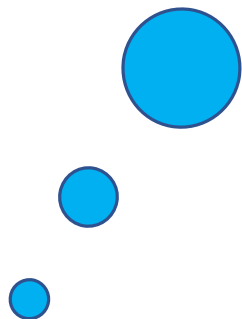
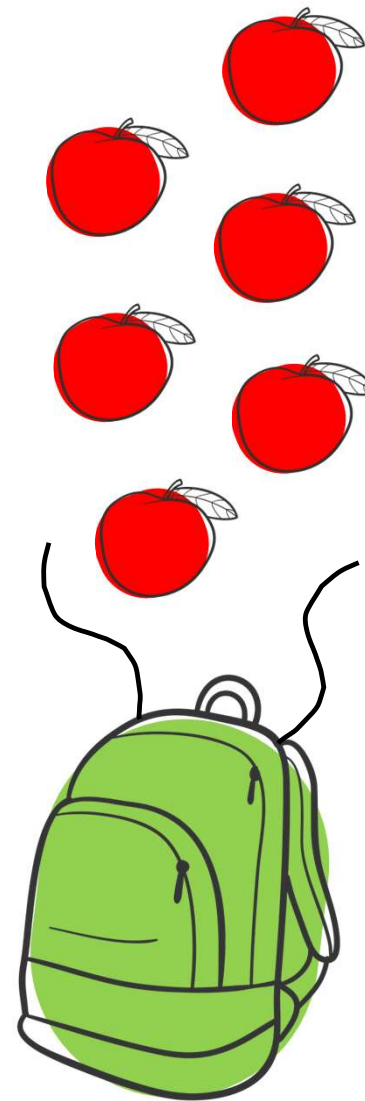


Hmmm. I'm starting to see a pattern...
So... $2 \text{ groups of } 2 \text{ equals } 4 \text{ sneakers,}$
that's two times as much.

The last day she placed three apples into the magic bookbag.

Guess how many apples she pulled out?

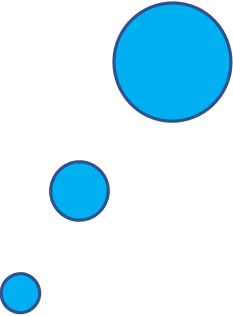
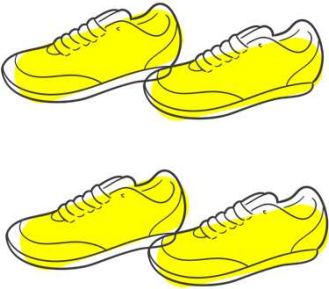
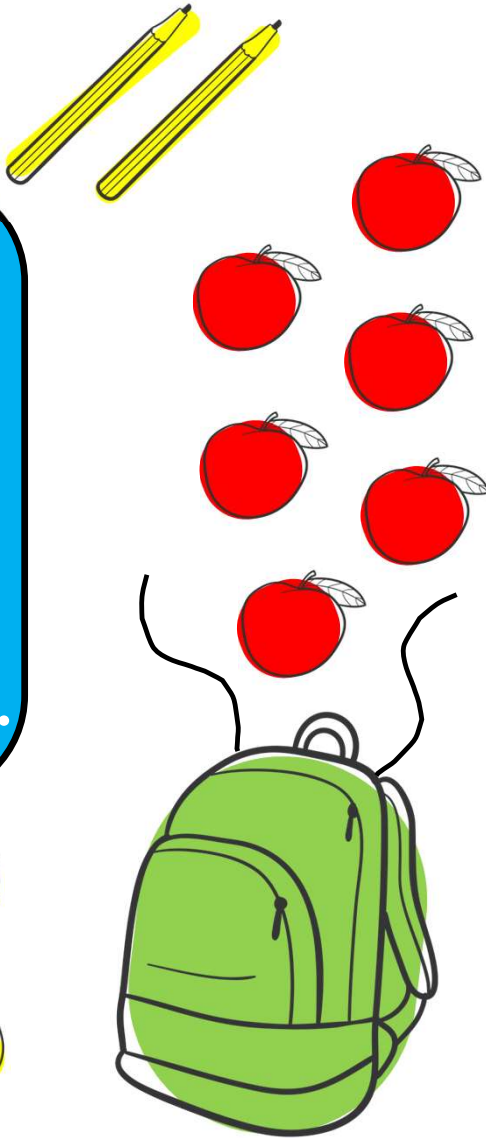
She pulled out 6 apples!
So... 2 groups of 3 apples is the same as
 $2 \times 3 = 6$



I wish I had a bookbag like that!

Now let's record what would happen if this pattern continued over time.

I'm going to fill in a 2s times table chart because the bookbag always creates twice the amount placed in it.





Let's Review!

We can read equations in sentence form.
The symbols in an equation can be read as words.

$$2 \times 2 = 4$$

↑ ↑
"groups of" "is the same as"

2 groups of 2 is the same as 4



On Day #1, she placed one pencil in and pulled two pencils out. Watch as I fill in the table.

2s Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2





On Day #2, she placed two sneakers in and pulled four sneakers out. I'll fill in the next row.

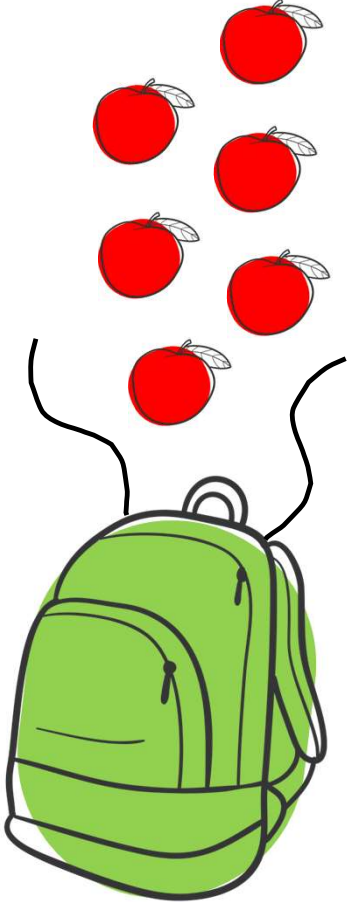
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4





On Day #3, she placed three apples in and pulled six apples out. I'll fill in the next now.

2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6





Next, we'll work together to figure out what to record in the rest of the table.

2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6





LET'S WORK TOGETHER

 **Problem #1**
LET'S WORK TOGETHER

What would happen if my friend placed 4 flowers in the magic bookbag? Use the graph paper to create a model to solve. Label the model and fill in the table.

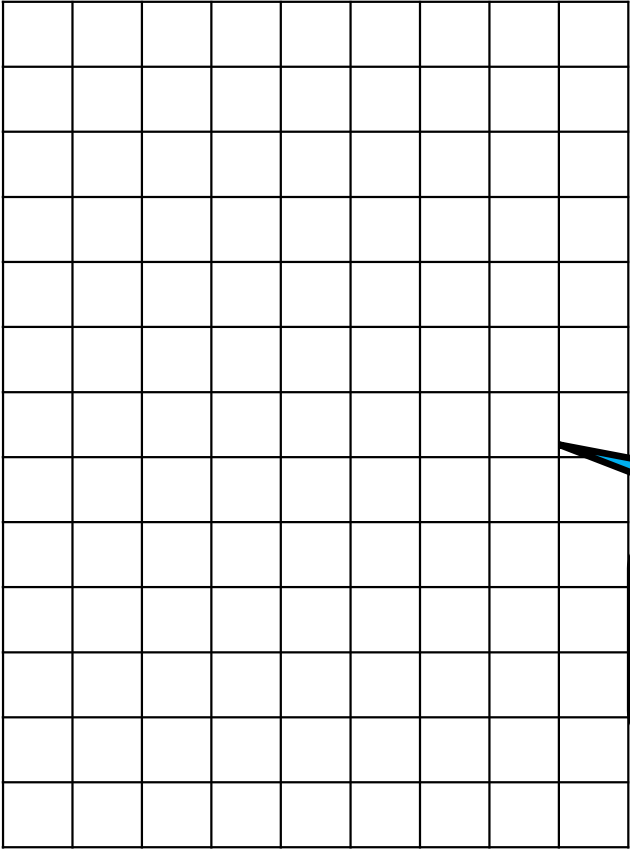


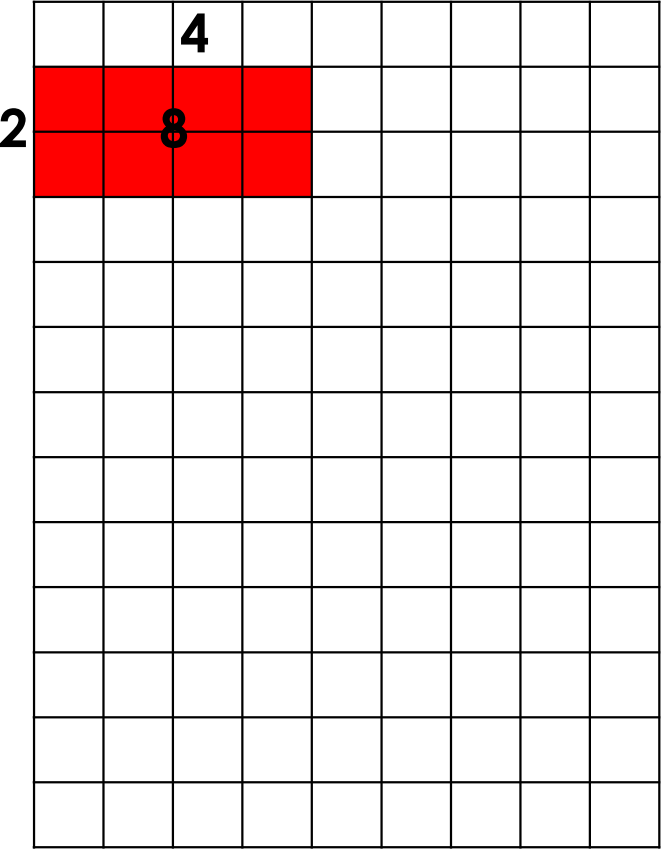
Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6

Draw a model showing the total number of flowers she would pull out the magic bookbag.



 **Problem #1**
LET'S WORK TOGETHER

She would pull out 2 groups of 4 or 8 flowers.
Label the model and fill in the table.

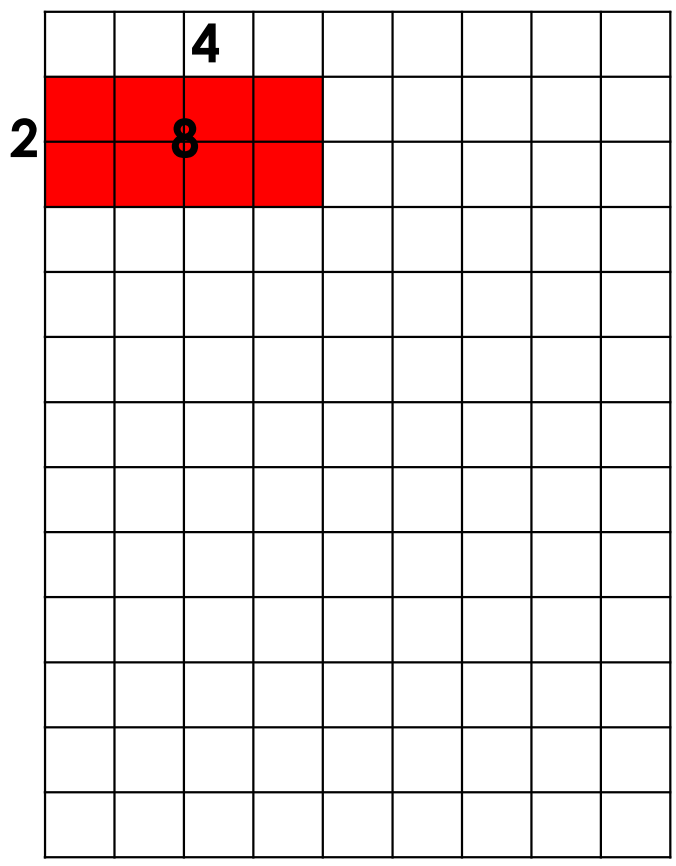


2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8



 **Problem #2**
LET'S WORK TOGETHER

How are 2×4 and $4 + 4$ the same?
Explain in your journal.



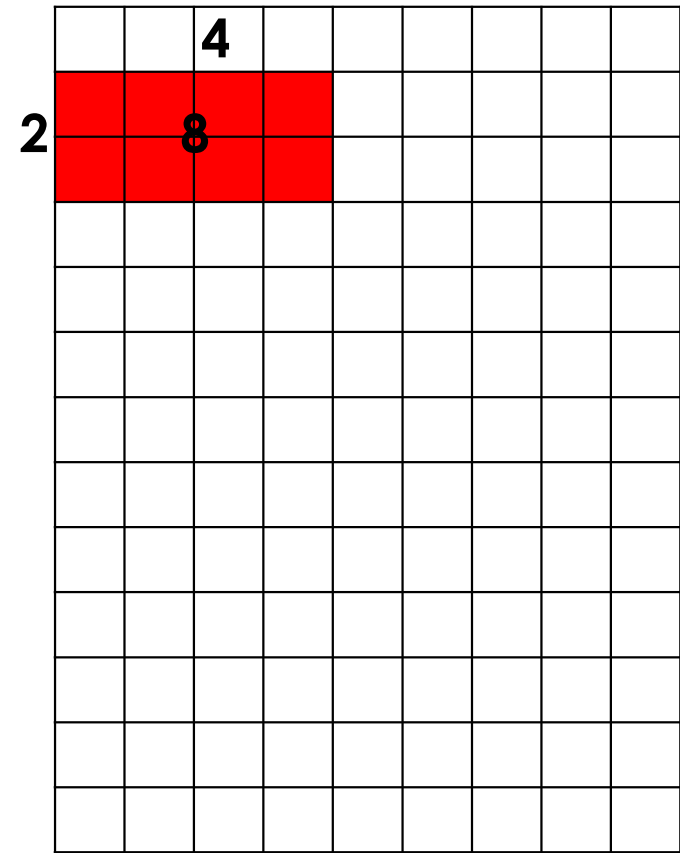
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8

Both equal 8.



 **Problem #3**
LET'S WORK TOGETHER

How are 2×4 and $4 + 4$ different?
Explain in your journal.



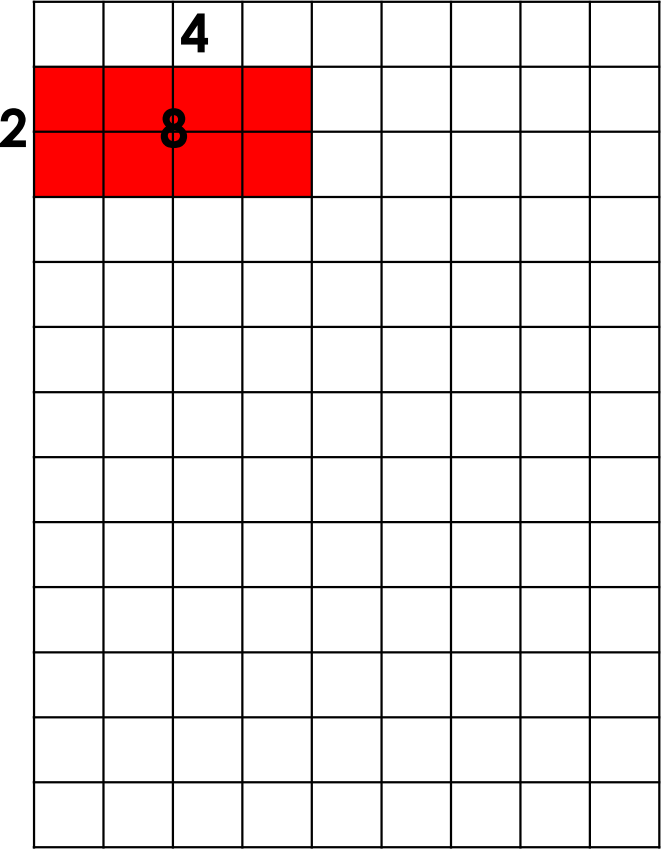
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8

Addition and multiplication are different operations.
The numbers in both operations have different meanings.



 **Problem #4**
LET'S WORK TOGETHER

What patterns do you notice with the answers in the chart? Explain in your journal.



2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8

They are all even numbers and they increase by 2.



CHECK - IN

- What did you notice?
- Can you make a connection to anything else you already know? How?
- Do you have any questions?



IT'S YOUR TURN

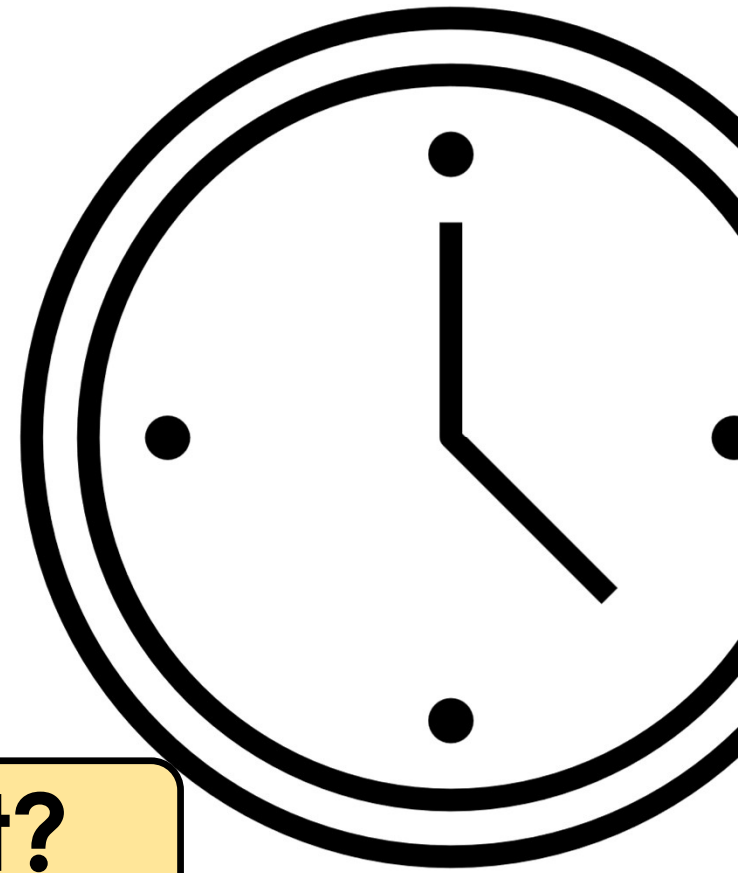


Now It's **“YOUR TURN”** to Solve



Don't forget to show your work!

Time to **Discuss** and **Check** Your Answers

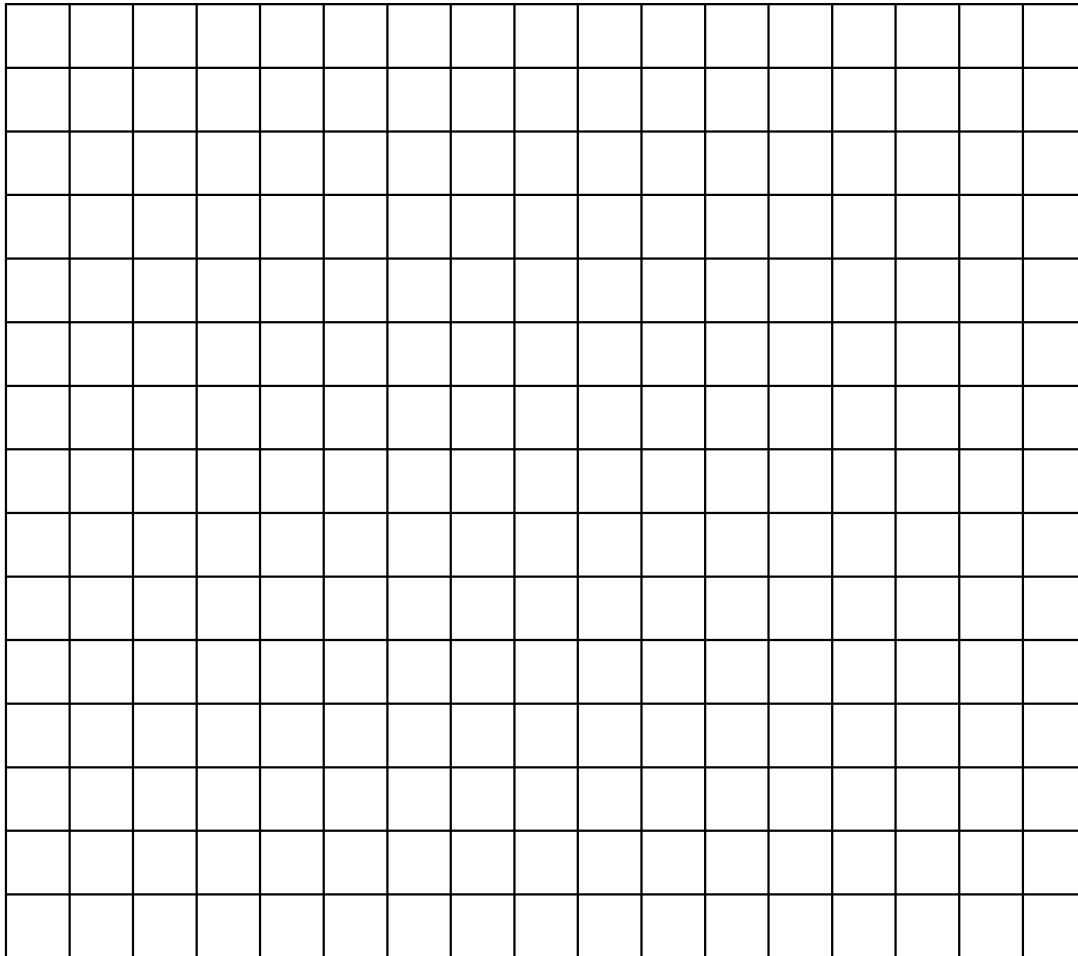


How did you solve it?



YOUR TURN
Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×5 . Fill in all the columns.



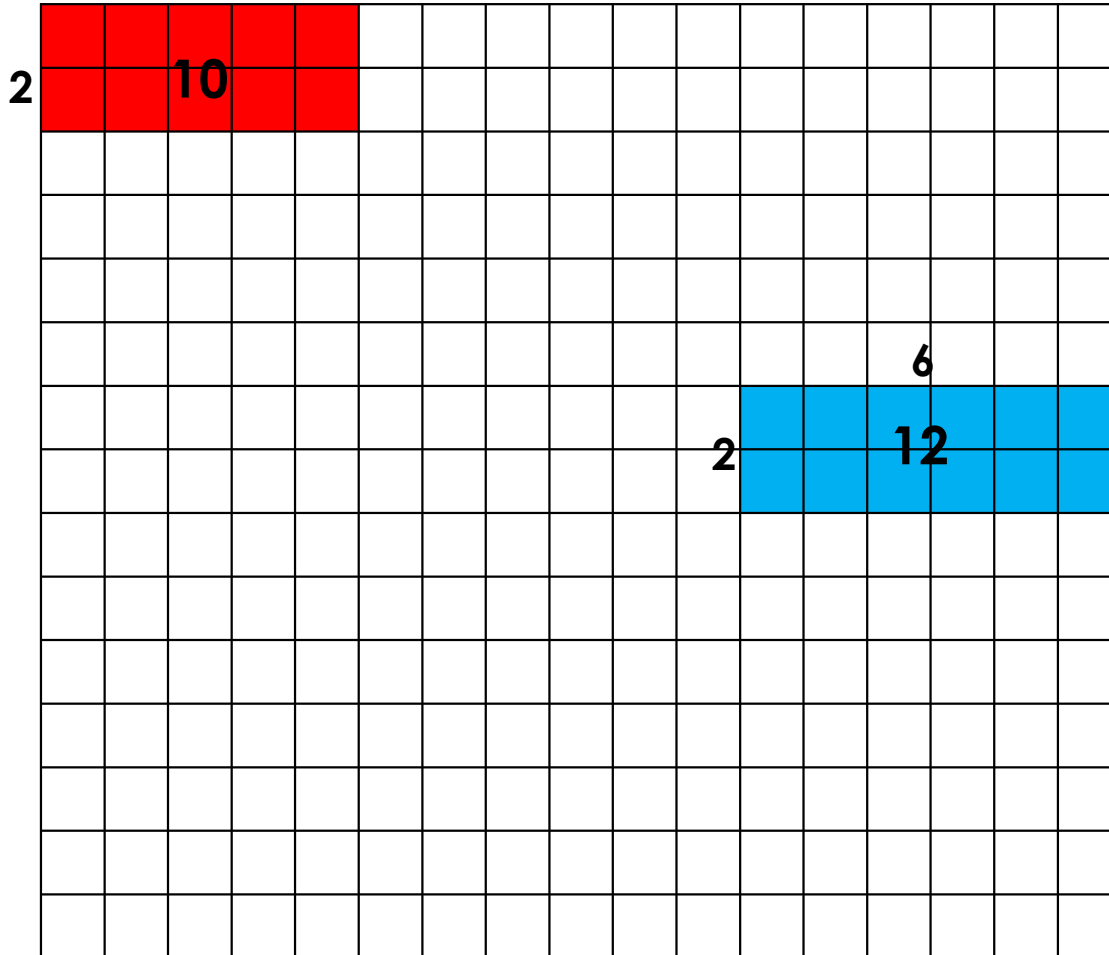
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5		
	2×6		
	2×7		
	2×8		
	2×9		
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×6 . Fill in all the columns.

5



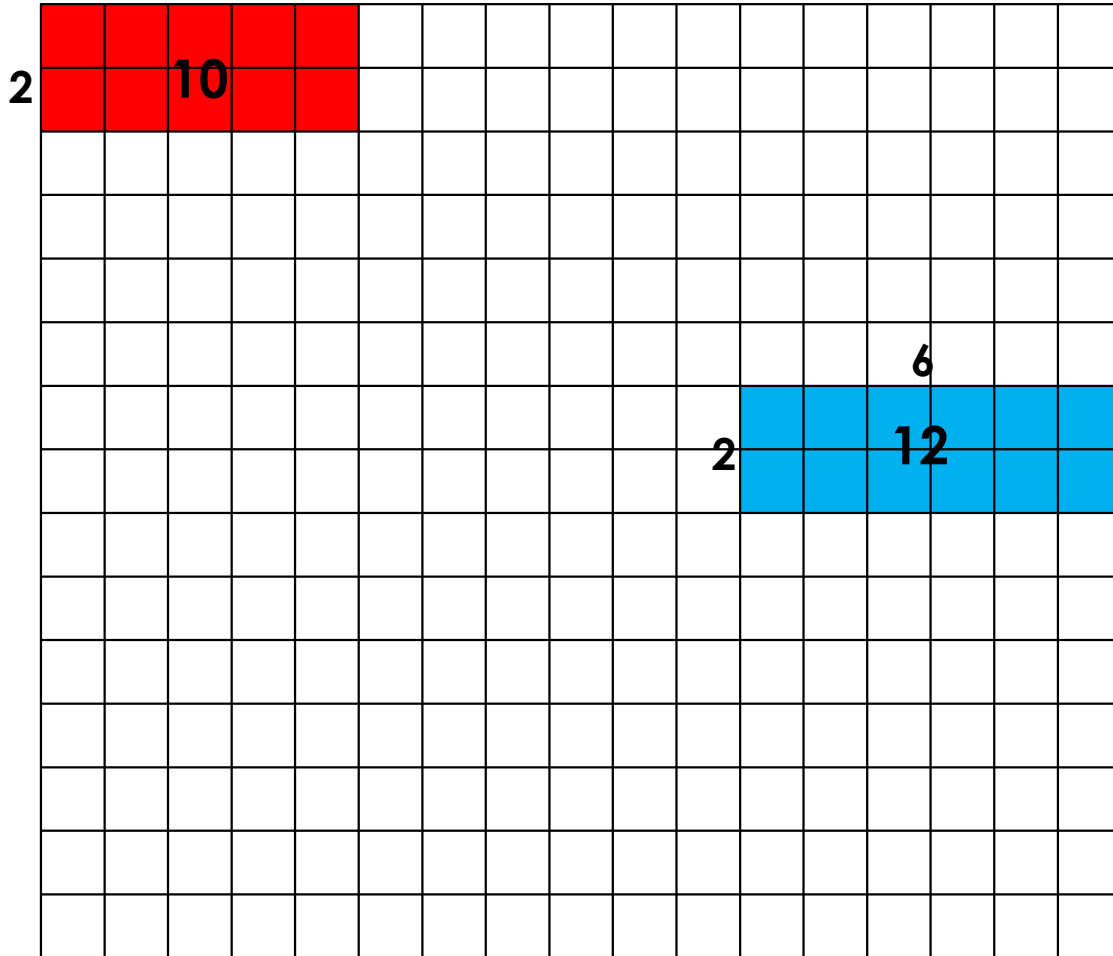
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7		
	2×8		
	2×9		
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×7 . Fill in all the columns.

5



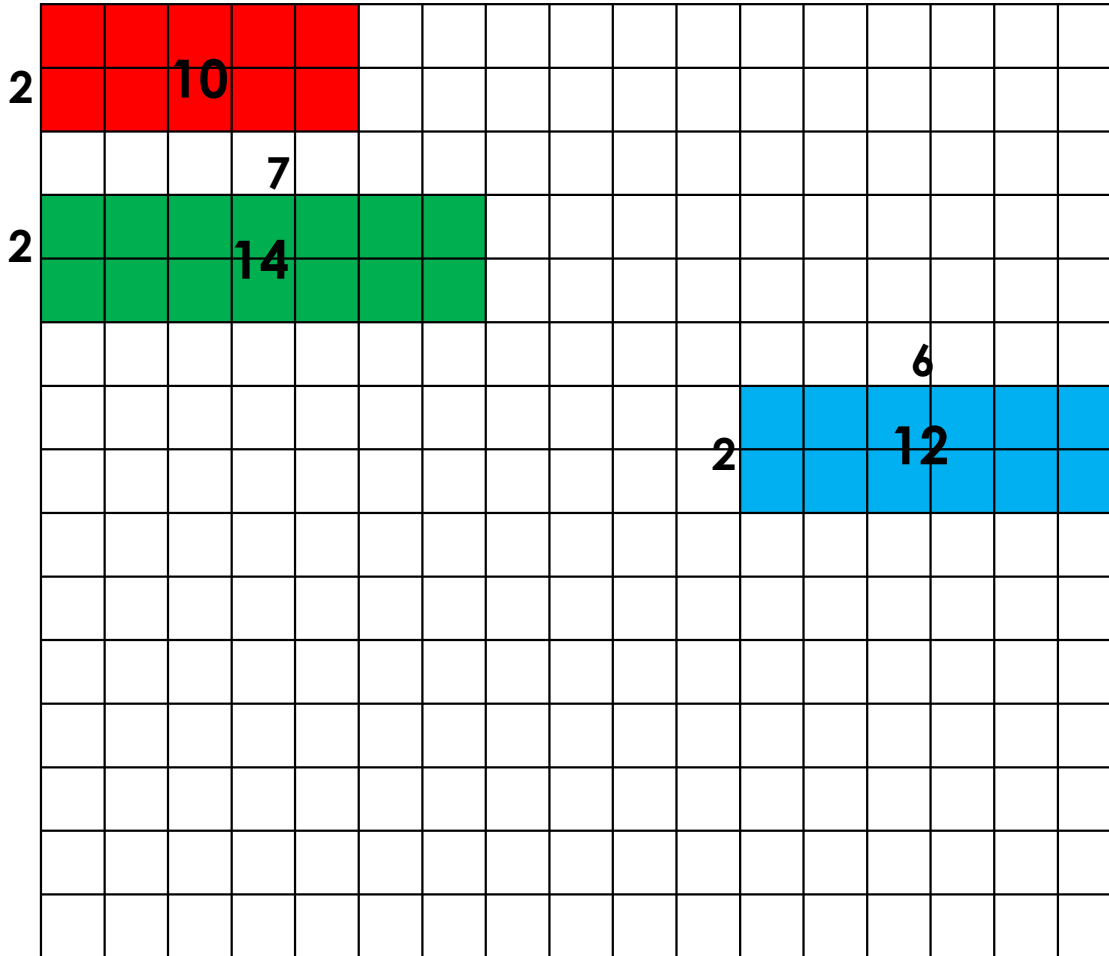
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7		
	2×8		
	2×9		
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×7 . Fill in all the columns.

5



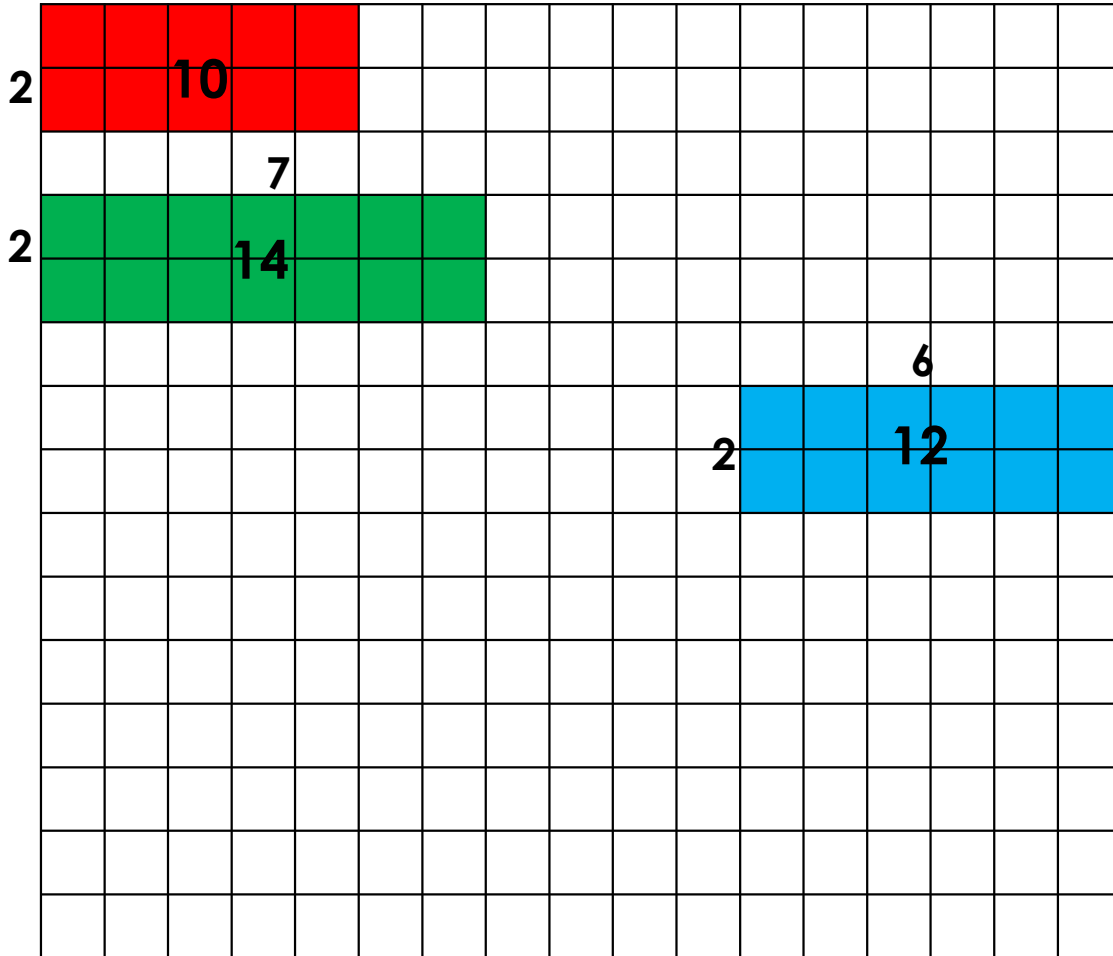
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8		
	2×9		
	2×10		
	2×11		
2×12			



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×8 . Fill in all the columns.

5



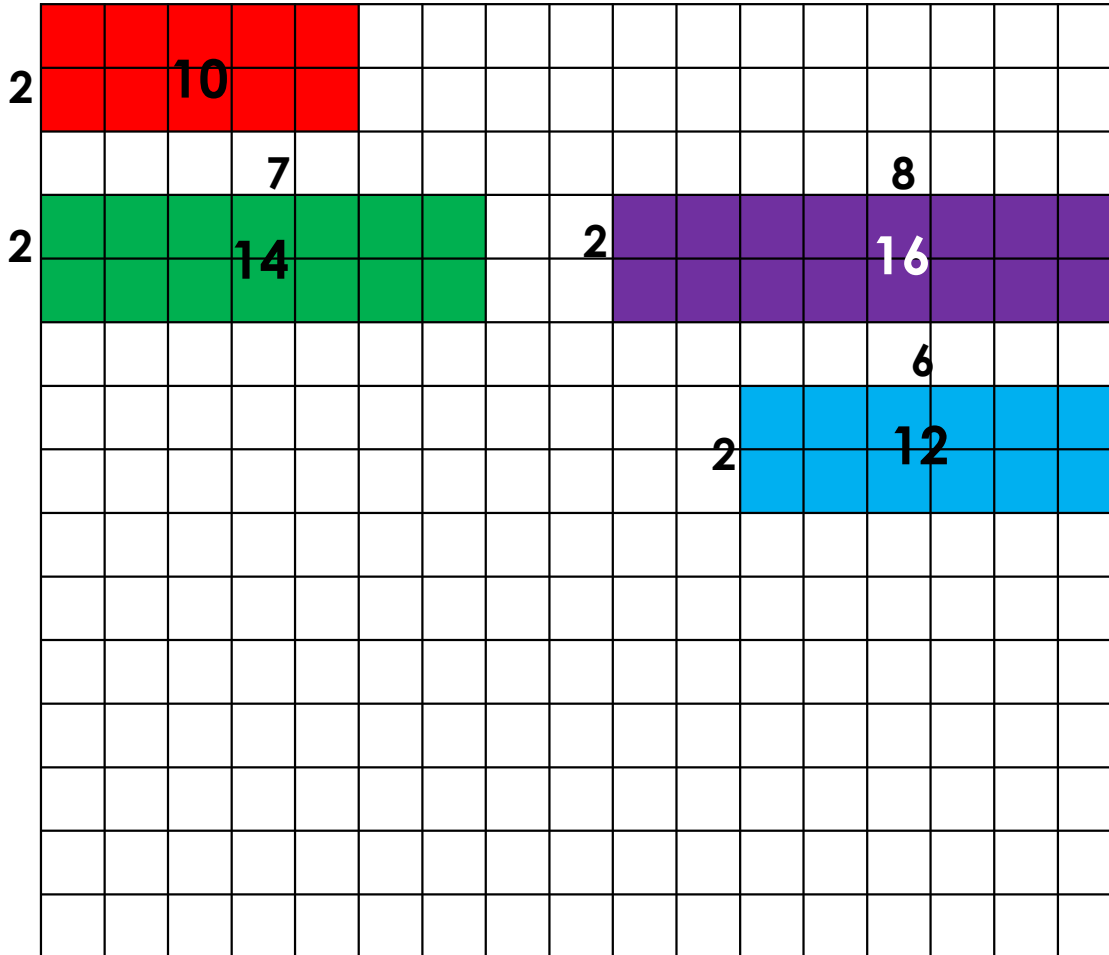
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8		
	2×9		
	2×10		
	2×11		
2×12			



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×8 . Fill in all the columns.

5



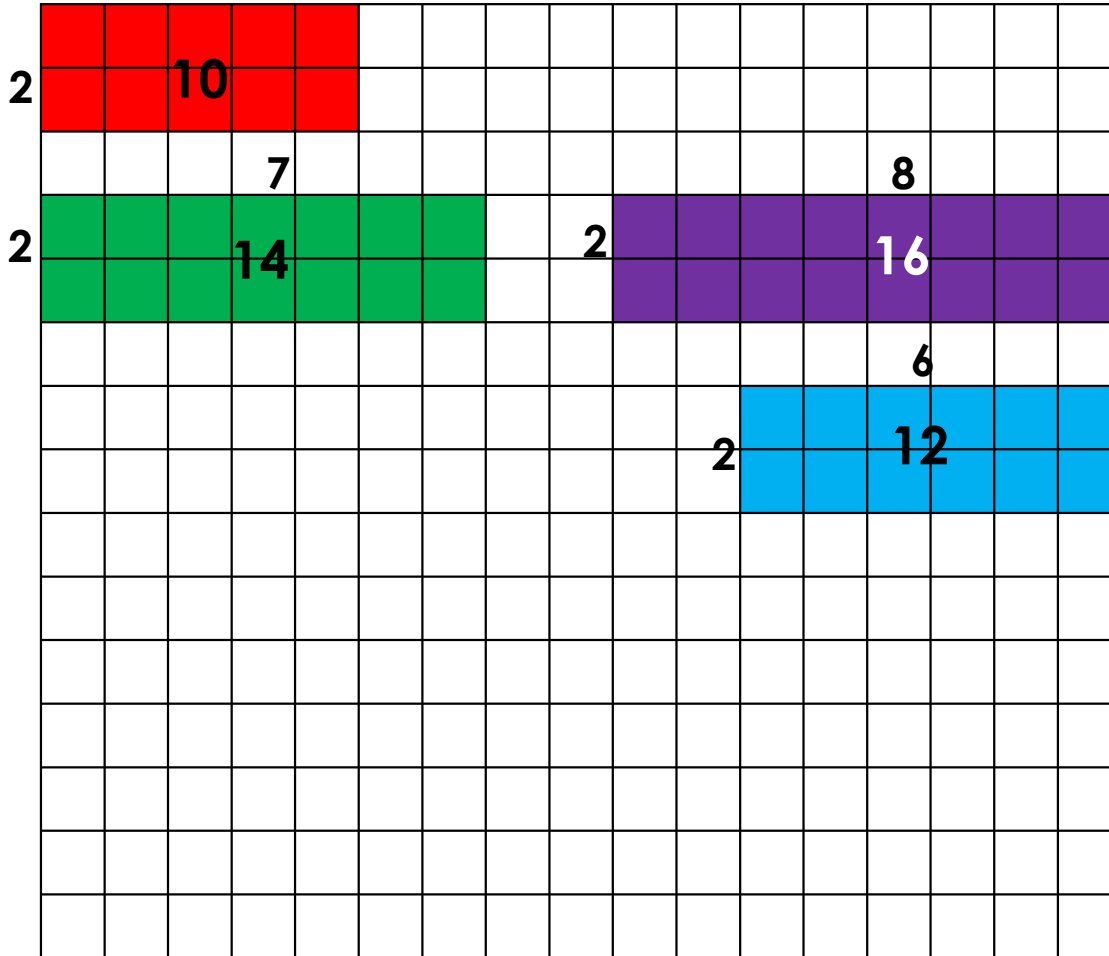
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9		
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×9 . Fill in all the columns.

5



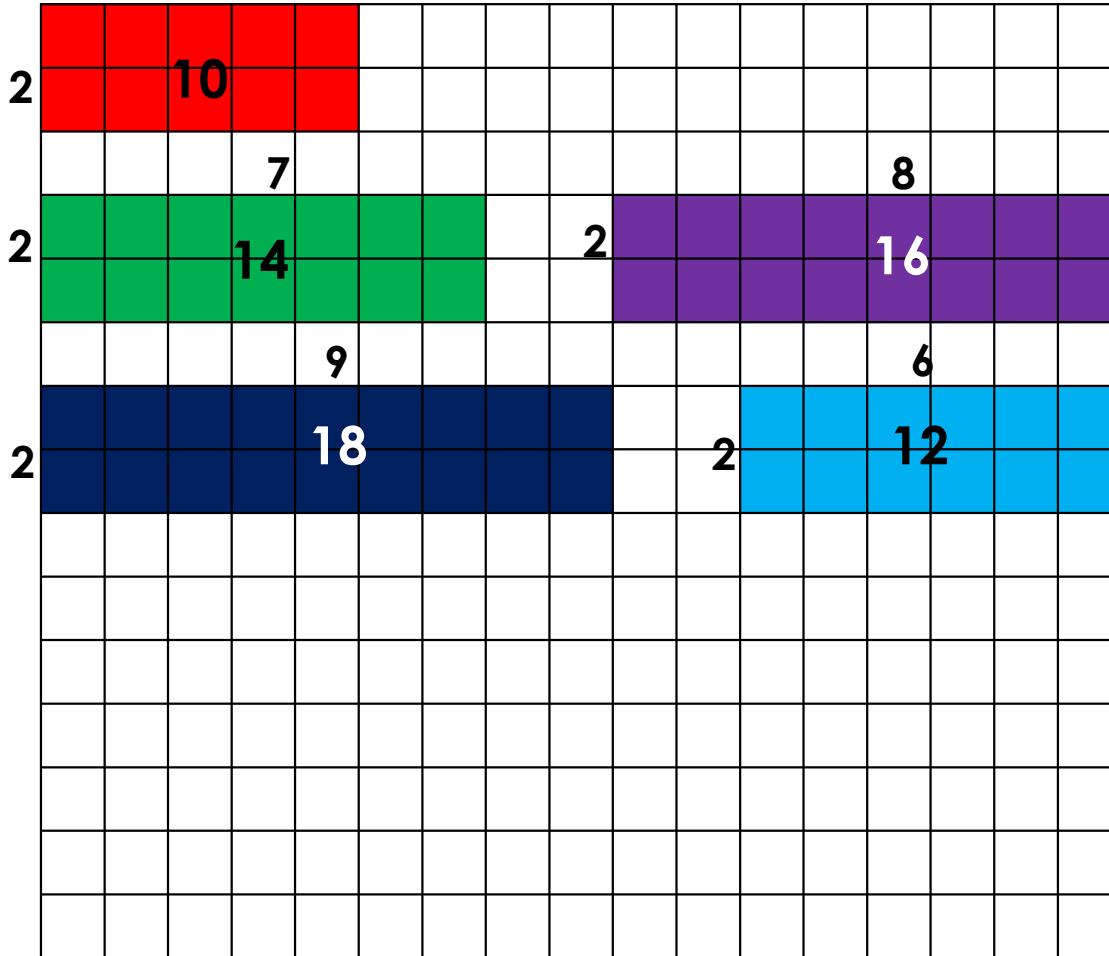
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9		
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×9 . Fill in all the columns.

5



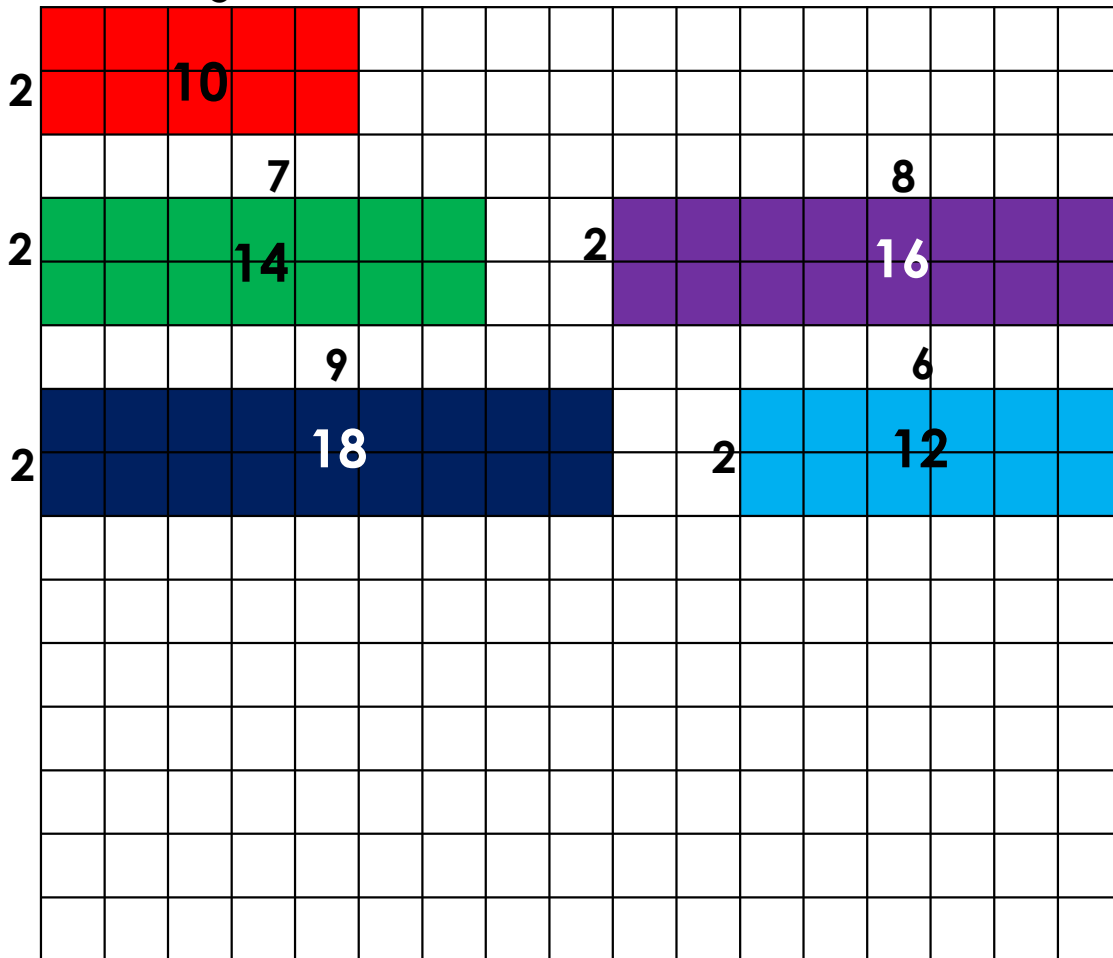
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×10 . Fill in all the columns.

5



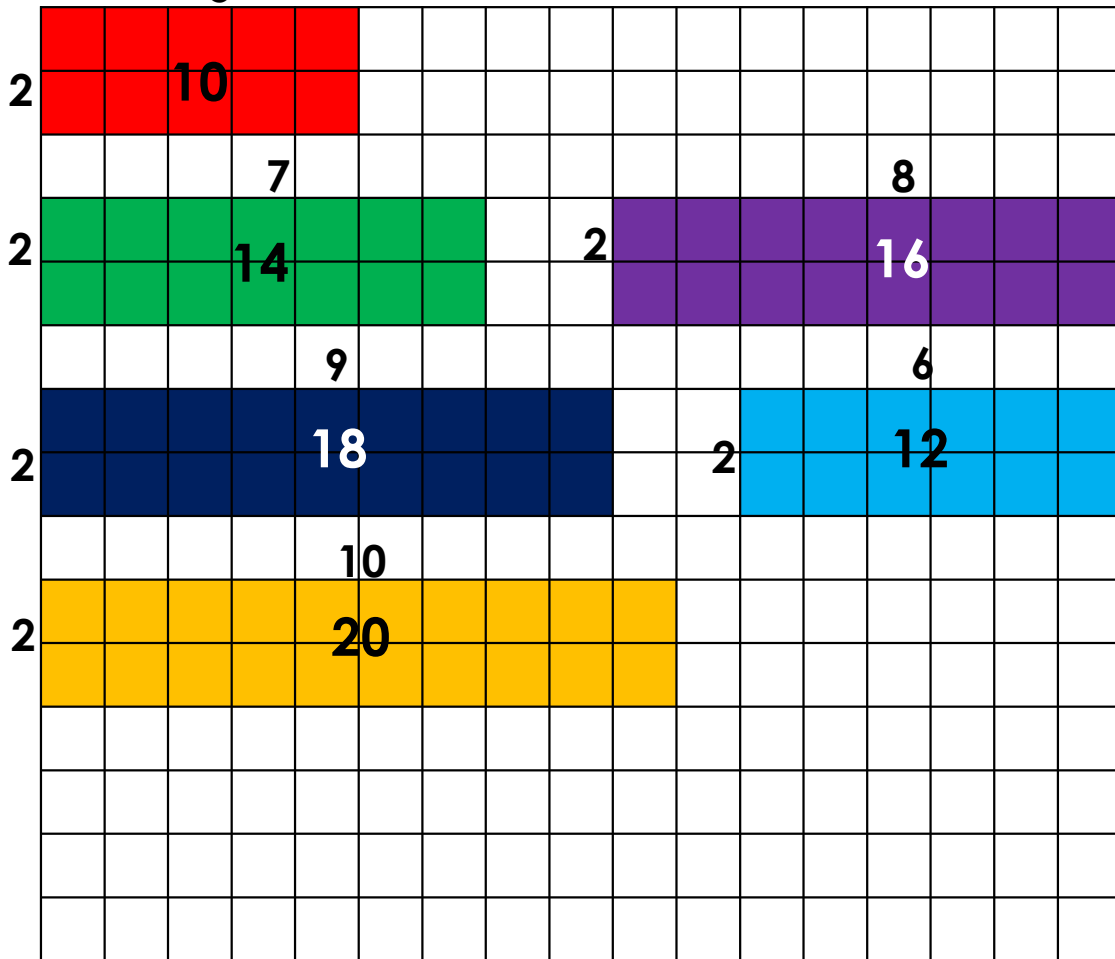
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10		
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×10 . Fill in all the columns.

5



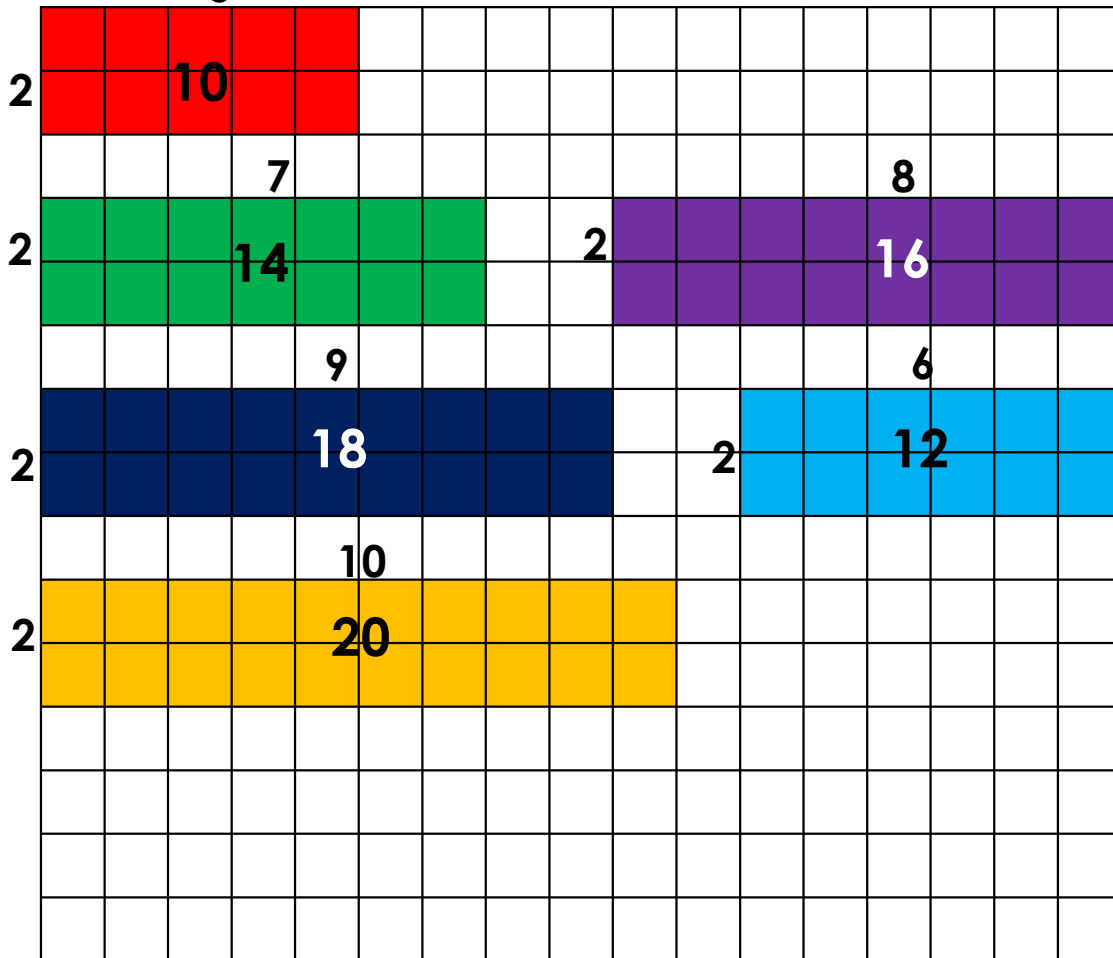
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10	$10 + 10$	20
	2×11		
	2×12		



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×11 . Fill in all the columns.

5



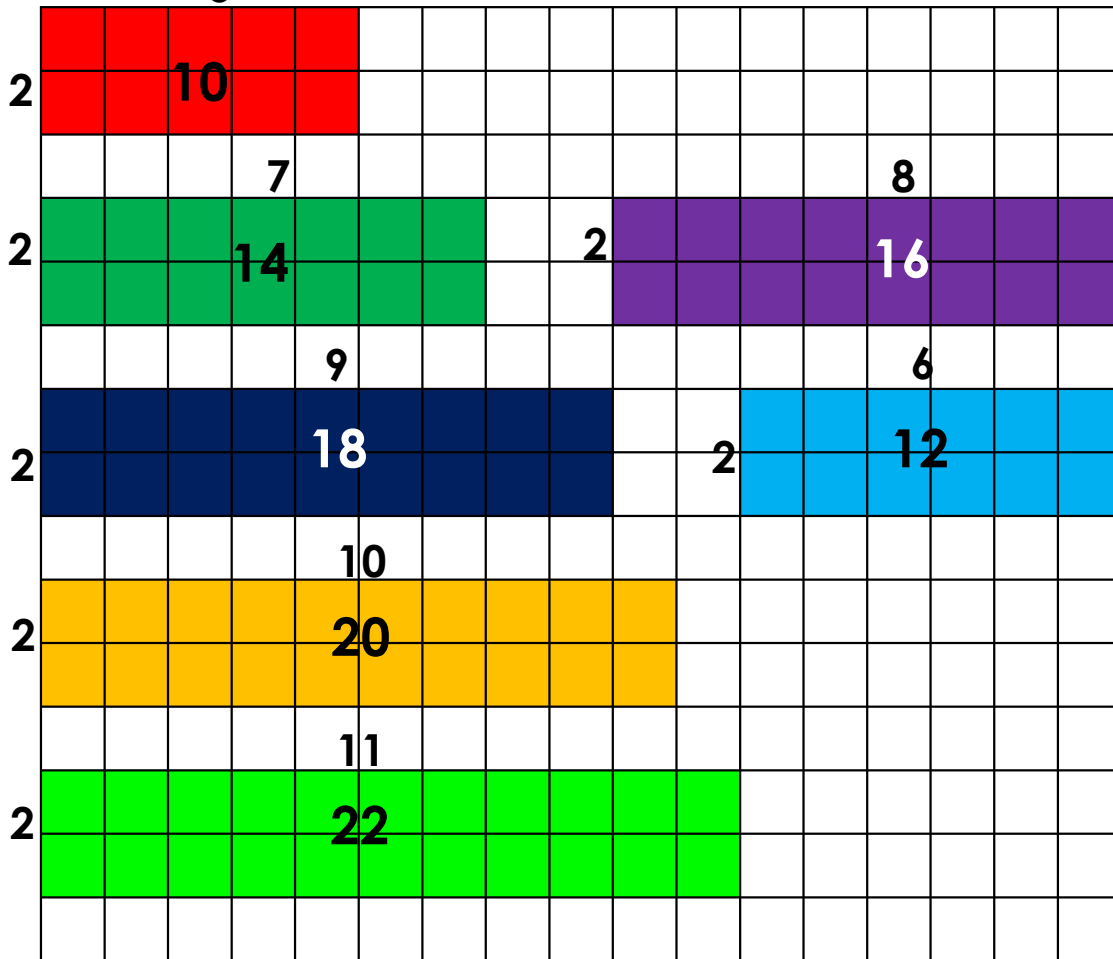
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10	$10 + 10$	20
	2×11		
2×12			



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to show 2×11 . Fill in all the columns.

5



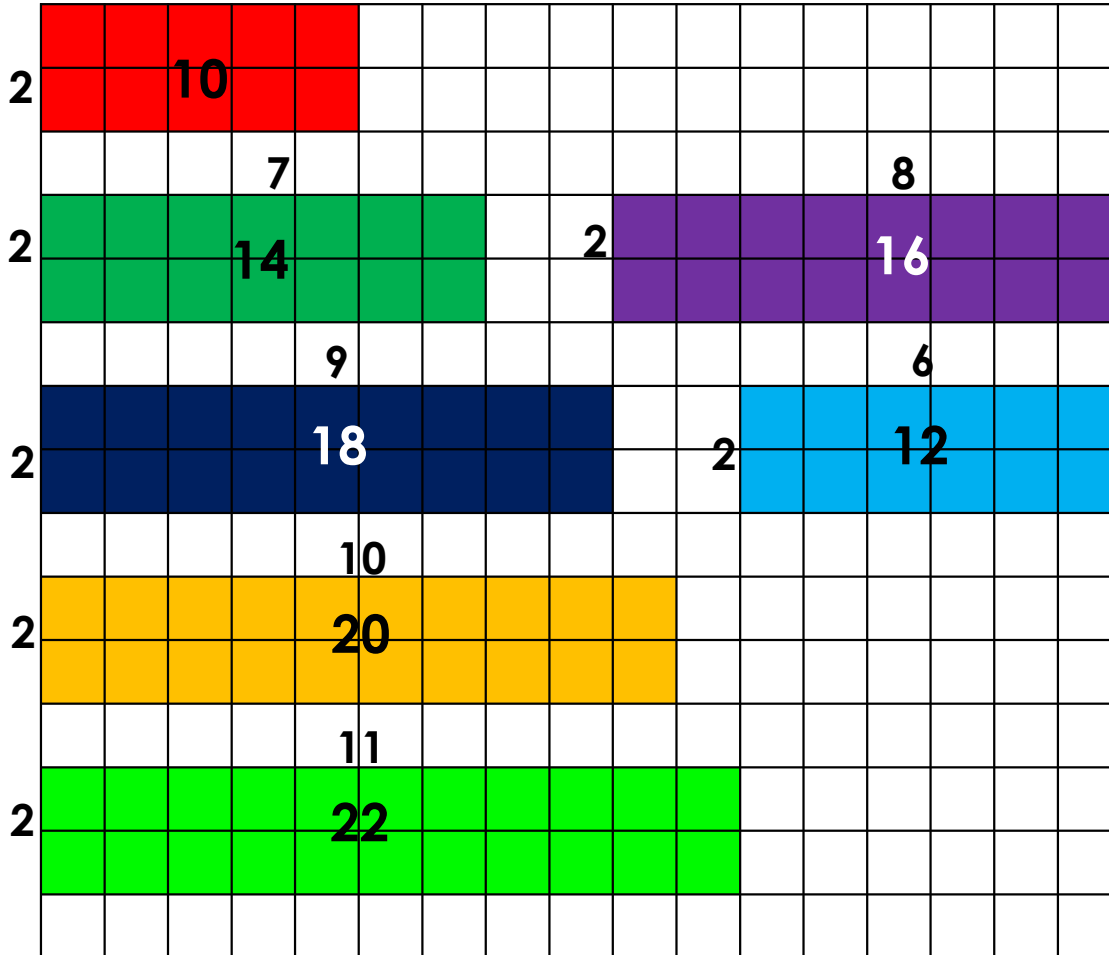
2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10	$10 + 10$	20
	2×11	$11 + 11$	22
2×12			



YOUR TURN
Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to **show 2×12** . Fill in all the columns.

5

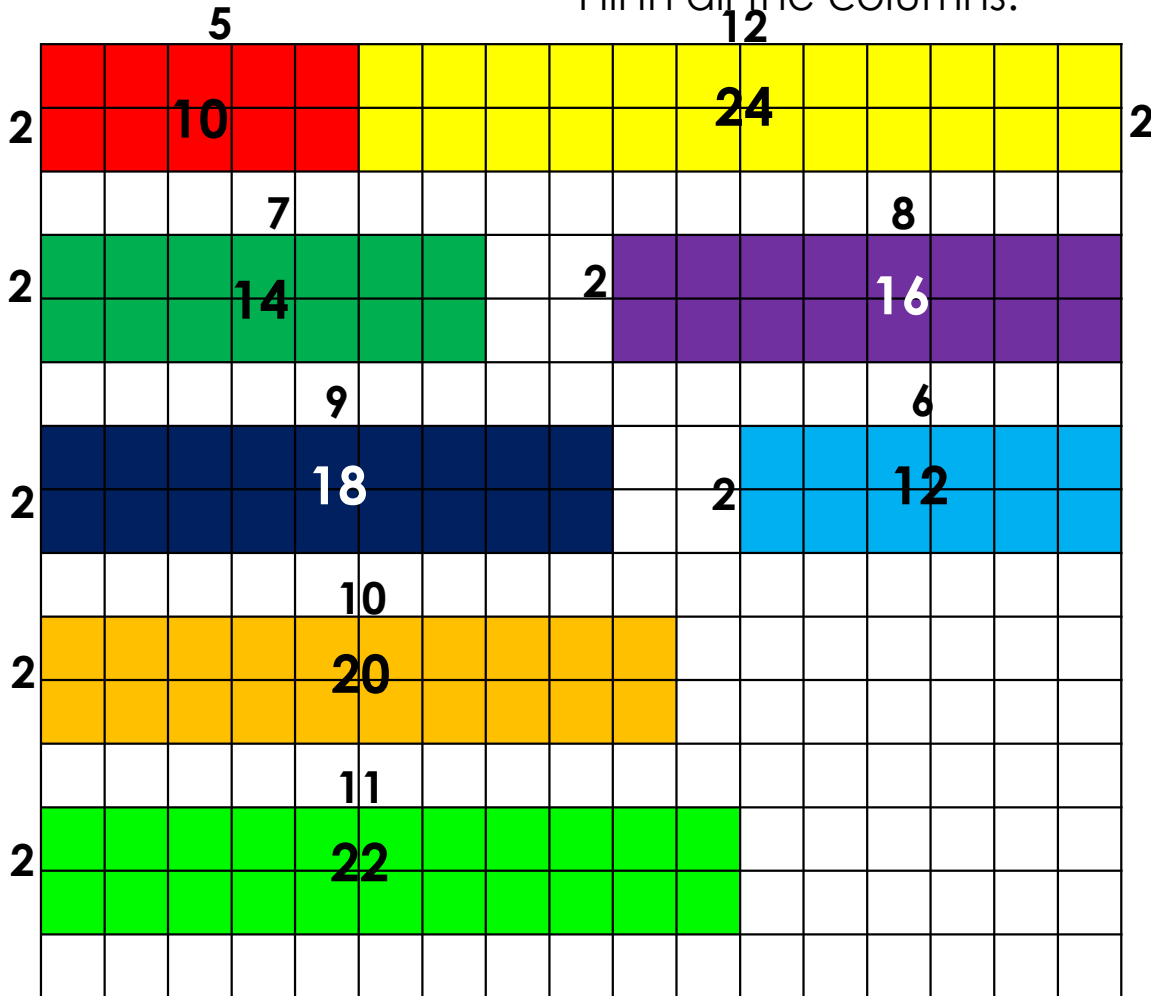


2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
2×10	$10 + 10$	20	
2×11	$11 + 11$	22	
2×12			



YOUR TURN Problem

Use the graph paper to create models to solve the bolded multiplication facts in the chart. Draw and label a model to **show 2×12** . Fill in all the columns.



2 Times Table Chart	Multiplication Fact	Addition Fact	Answer
	2×1	$1 + 1$	2
	2×2	$2 + 2$	4
	2×3	$3 + 3$	6
	2×4	$4 + 4$	8
	2×5	$5 + 5$	10
	2×6	$6 + 6$	12
	2×7	$7 + 7$	14
	2×8	$8 + 8$	16
	2×9	$9 + 9$	18
	2×10	$10 + 10$	20
	2×11	$11 + 11$	22
2×12	$12 + 12$	24	



Problem #9

YOUR TURN

What strategy can you use to solve the 2s times table?





Problem #9

YOUR TURN

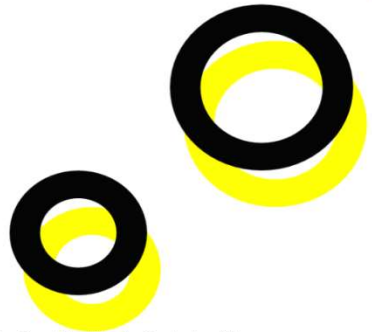
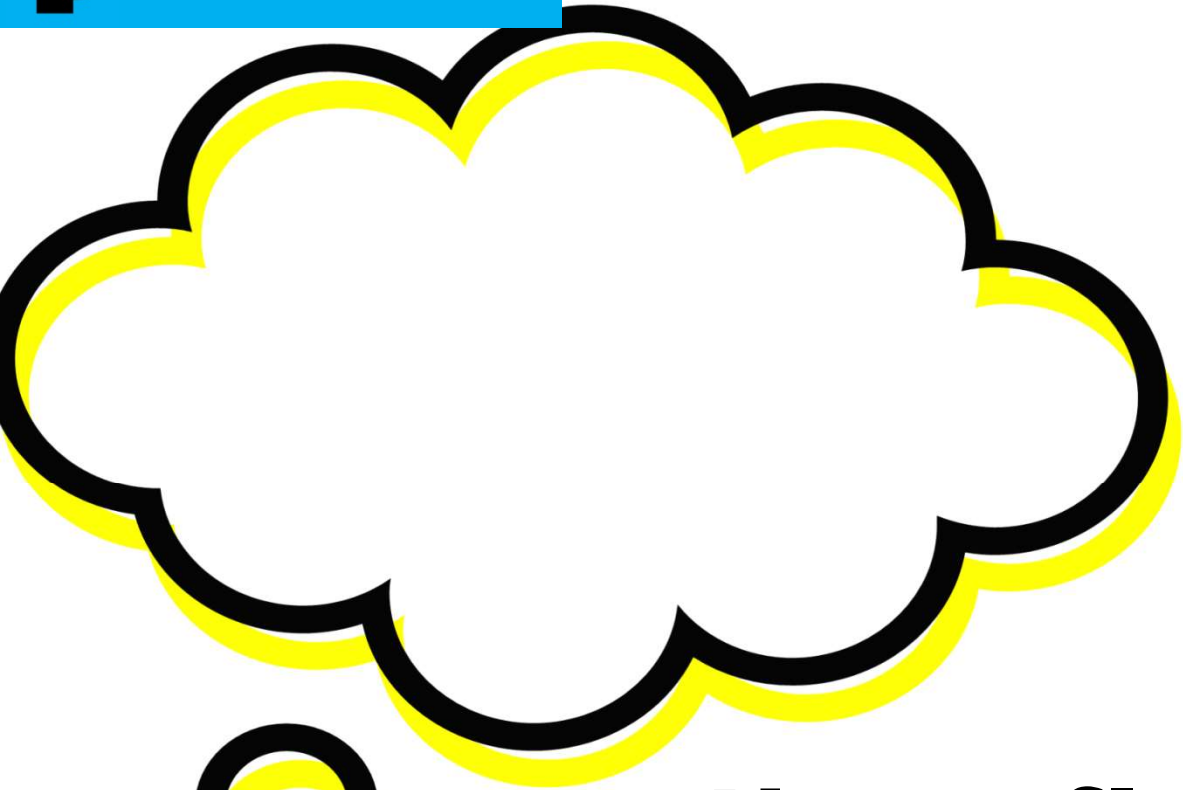
What strategy can you use to solve the 2s times table?

Answers May Vary

I can use my addition doubles facts.
I can also skip count by two to find them.



 **Let's Reflect**



It's reflection time!