

Eureka Math

2nd Grade Module 6 Lesson 10

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



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Reflecting your Teaching Style and Learning Needs of Your Students

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- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.

Screen A

ReadyGEN™ in Action

3rd Grade
Unit 3, Module A
Lesson 1

“pop-out”

Screen B

Gr3(2) U3MAL1 Sample Lesson.pptx

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ReadyGEN™ in Action

3rd Grade
Unit 3, Module A
Lesson 1

Icons



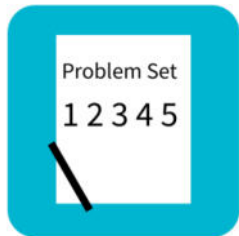
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



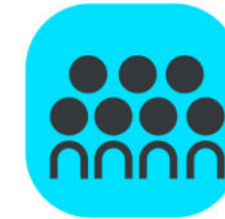
Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



Small Group Time



Materials Needed:

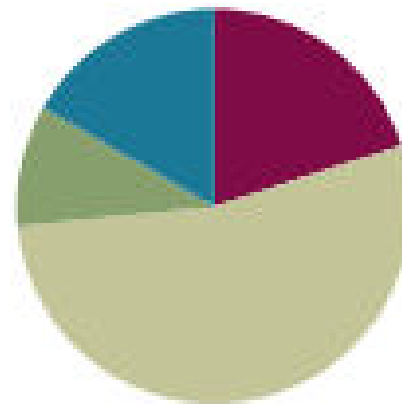
- Sprint
- (T/S) 25 square tiles

Lesson 10

Objective: Use square tiles to compose a rectangle, and relate to the array model.

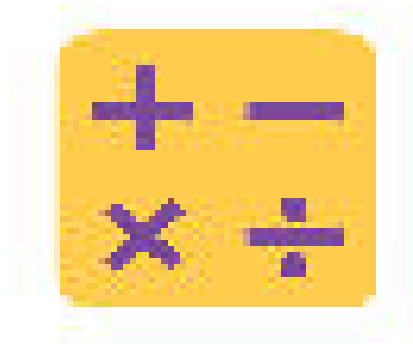
Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(6 minutes)
■ Concept Development	(32 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





Use square tiles to compose a rectangle,
and relate to the array model.



Happy Counting by Tens

Crossing 100

Watch my fingers to know whether to count up or down. A closed hand means stop. (Show signals while explaining.)

Let's count by **tens**, starting at 270. Ready?

Try it for 30 seconds with your partner, starting at 300.
Partner A, you are the teacher today.



Sprint

A STORY OF UNITS

Lesson 10 Sprint

2•6

A

Number Correct: _____

Sums to the Teens

1.	$9 + 1 =$	
2.	$9 + 2 =$	
3.	$9 + 3 =$	
4.	$9 + 9 =$	
5.	$8 + 2 =$	
6.	$8 + 3 =$	
7.	$8 + 4 =$	

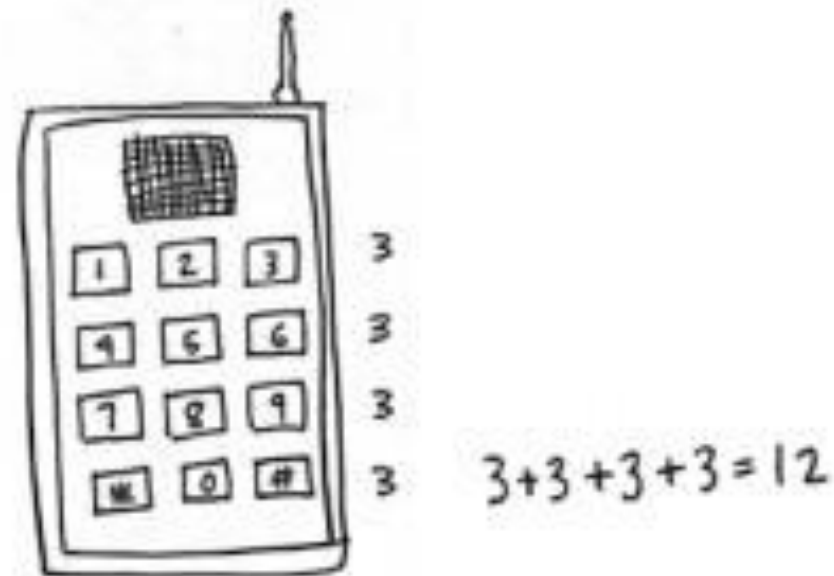
23.	$7 + 3 =$	
24.	$7 + 4 =$	
25.	$7 + 5 =$	
26.	$7 + 9 =$	
27.	$6 + 4 =$	
28.	$6 + 5 =$	
29.	$6 + 6 =$	



Application Problem

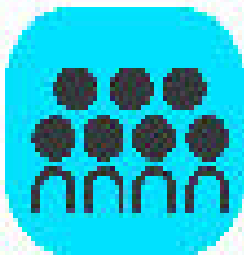
Sandy's toy telephone has buttons arranged in 3 columns and 4 rows.

- Draw a picture of Sandy's telephone.
- Write a repeated addition equation to solve for the total number of buttons on Sandy's telephone.



Sandy's telephone has
12 buttons total.

Concept Development



Part 1- Use a specific number of tiles to create a rectangle with no gaps or overlaps.

Place 10 tiles in two equal groups.



Organize them into 2 equal rows, then push them together with no gaps or overlaps.

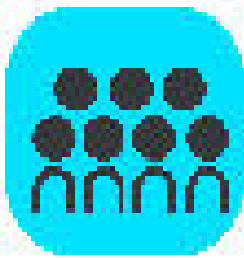


How many rows did you make?

How many tiles are in each row?

What repeated addition sentence can we use to find the total for 2 rows of 5?

Concept Development



Part 1- Use a specific number of tiles to create a rectangle with no gaps or overlaps.

Using the same tiles, make 2 columns of 5 tiles into a rectangle.



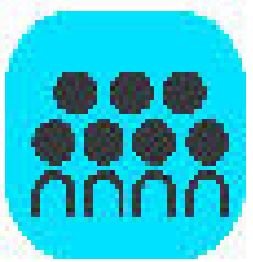
Turn & talk- What repeated addition equation can we use to find the total?

$$5 + 5 = 10$$

Are the equations and totals equal for both arrays?

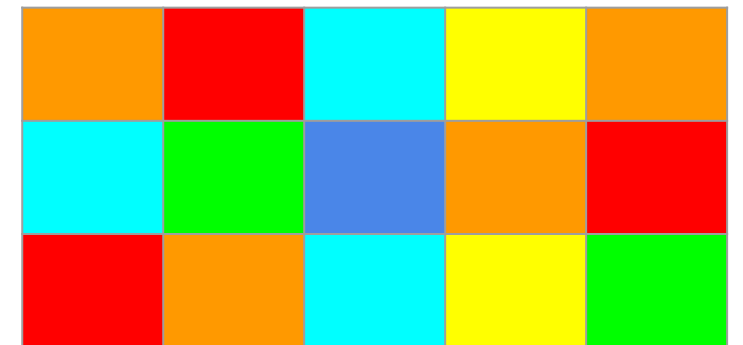
How is this possible?

Concept Development



Part 1- Use a specific number of tiles to create a rectangle with no gaps or overlaps.

Place 15 tiles in three equal groups. Organize them into 3 equal rows, then push them together with no gaps or overlaps.



How many rows did you make?

How many tiles are in each row?

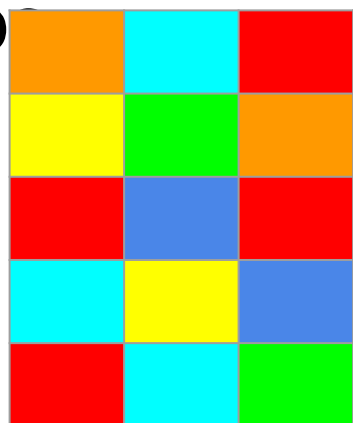
What repeated addition sentence can we use to find the total?

Using the same tiles, make 5 rows of 3. Push together with no gap

How many rows did you make?

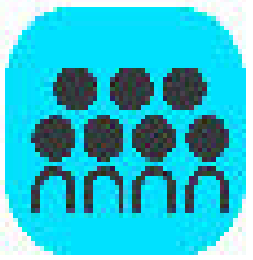
How many tiles are in each row?

What repeated addition sentence can we use to find the total?



Are the equations and totals equal for both arrays? How is this possible?

Concept Development



Part 1- Use a specific number of tiles to create a rectangle with no gaps or overlaps.

Place 12 tiles in four equal groups. Organize them into four equal rows, then push them together with no gaps or overlaps.

How many rows did you make?

How many tiles are in each row?

What repeated addition sentence can we use to find the total?

Using the same tiles, make 3 rows of 4. Push together with no gaps.

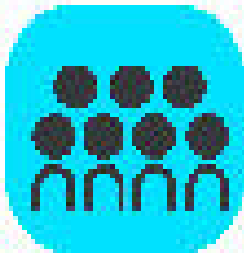
How many rows did you make?

How many tiles are in each row?

What repeated addition sentence can we use to find the total?

Are the equations and totals equal for both arrays? How is this

Concept Development



Problem 2: Compose a square from rows and columns.

Look at the array we just made. How can we change this rectangle from 3 columns or four to have the same number of rows and columns. Turn & Talk.

3 groups of 3 or 4 groups of 4.
What's the new shape of our array?



Let's make another square array using 25 square tiles with equal rows and columns.

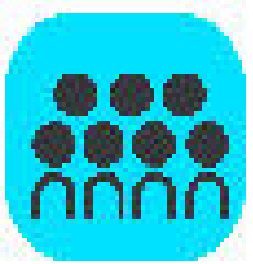
How many rows and columns does your array have?

5 rows and 5 columns

What repeated addition sentence can represent this array?

$$5 + 5 + 5 + 5 + 5 = 25$$

Concept Development



Problem 2: Compose a square from rows and columns.

Let's make another square array using 16 square tiles with equal rows and columns.

How many rows and columns does your array have?

4 rows and 4 columns

What repeated addition sentence can represent this array?

$$4 + 4 + 4 + 4 = 16$$

So, what do you know about making an array with equal rows and columns?

Can we make a square array with 10 tiles?

Name _____

Date _____

Use your square tiles to construct the following rectangles with no gaps or overlaps. Write a repeated addition equation to match each construction.

1. a. Construct a rectangle with 2 rows of 3 tiles.

- b. Construct a rectangle with 2 columns of 3 tiles.

2. a. Construct a rectangle with 5 rows of 2 tiles.



Debrief

For problem 1a and 1b, share your rectangles with a partner and describe them using rows and columns. How do your rectangles match the repeated addition sentence?

For problem 2a and 2b, share your rectangles with a partner and describe them using rows and columns. How are the rectangles composed of equal groups? How does your rectangle match the repeated addition sentence?

For problem 3, explain to your partner how you arranged the tiles into a rectangle. How did making equal rows and columns help you construct the rectangle.



Debrief

Squares are special rectangles that have the same number of rows and columns. In problem 4, you changed a rectangle into a square by removing a column.

Is there a different way to make a square from the array.

What repeated addition equation would we use to describe a square array with rows of 2?

Rows of 3?

Rows of 4?

Rows of 5?

What do you notice?

Why don't we relate triangles to an array model?



Exit Ticket

Name _____

Date _____

On this sheet, use your square tiles to construct the following arrays with no gaps or overlaps on this sheet. Write a repeated addition equation to match your construction.

1. a. Construct a rectangle with 2 rows of 5 tiles.

b. Write the repeated addition equation. _____