Eureka Math

2nd Grade
Module 6
Lesson 13

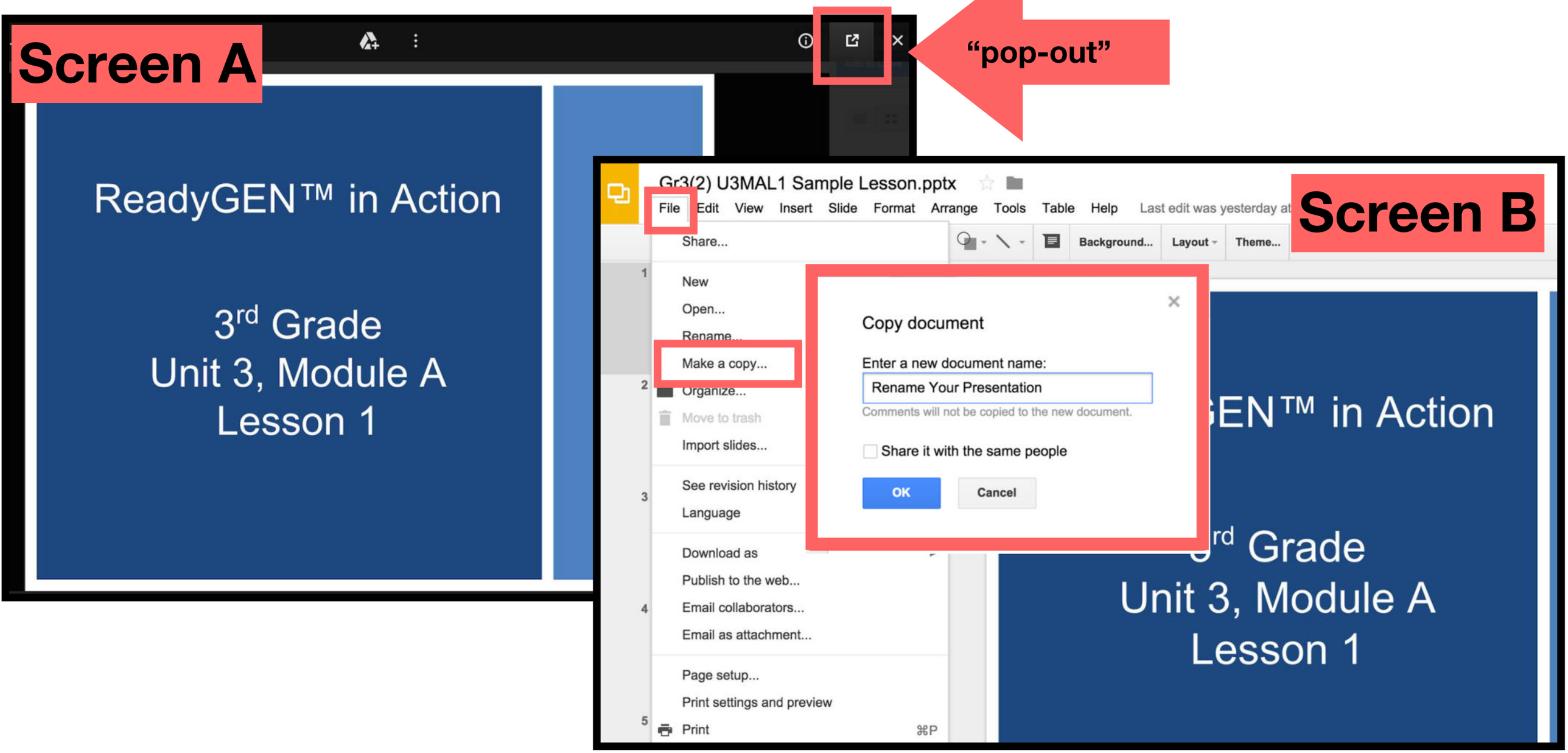
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- ➢ When the Google Slides presentation is opened, it will look like Screen A.
- ➢ Click on the “pop-out” button in the upper right hand corner to change the view.
- ➢ 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.



Icons

Read, Draw, Write

Learning Target

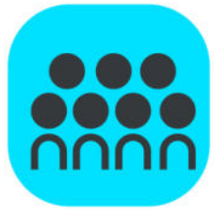
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

Materials Needed:

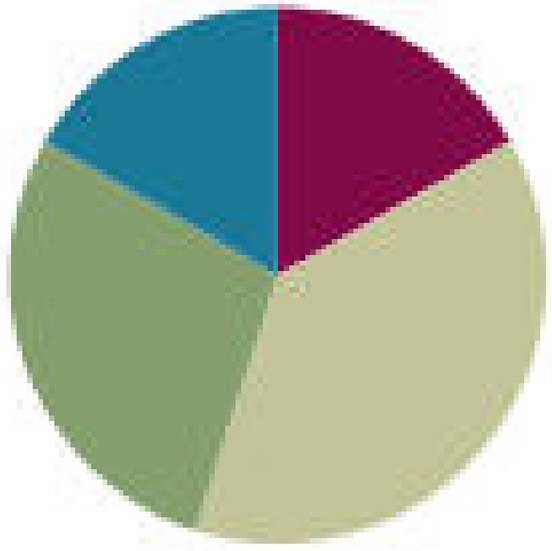
- Core Fluency Sprints
- (T/S) 25 square tiles
- Personal Whiteboards
- Rulers

Lesson 13

Objective: Use square tiles to decompose a rectangle.

Suggested Lesson Structure

Fluency Practice	(10 minutes)
Concept Development	(23 minutes)
Application Problem	(17 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Use square tiles to decompose a rectangle.

Make the Next 10 to Add

When I say “9 + 4”, you say “10 + 3”

19 + 4 = 29 + 4 = 29 + 14 = 59 + 14 =

9 + 6 = 19 + 6 = 19 + 16 = 29 + 16 =

8 + 3 = 18 + 3 = 18 + 13 = 58 + 13 =

8 + 5 = 18 + 5 = 18 + 15 = 38 + 15 =

7 + 6 = 17 + 6 = 17 + 16 =

Sprint

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set A | 2•6

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set B | 2•6

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set C | 2•6

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set D | 2•6

Name _____ Date _____

1.	19 – 9 =	21.	16 – 7 =

Concept Development

With your partner, use the tiles to construct a rectangle with 4 rows of 5.

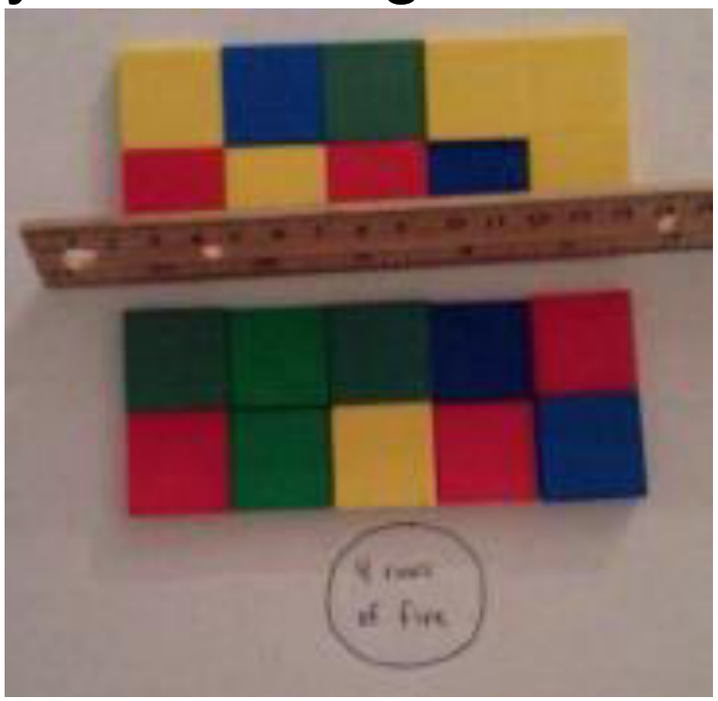
Tell your partner the total number of tiles in your rectangle and how you know.

Write the number of rows and the number in each row as the whole number in your number bond.

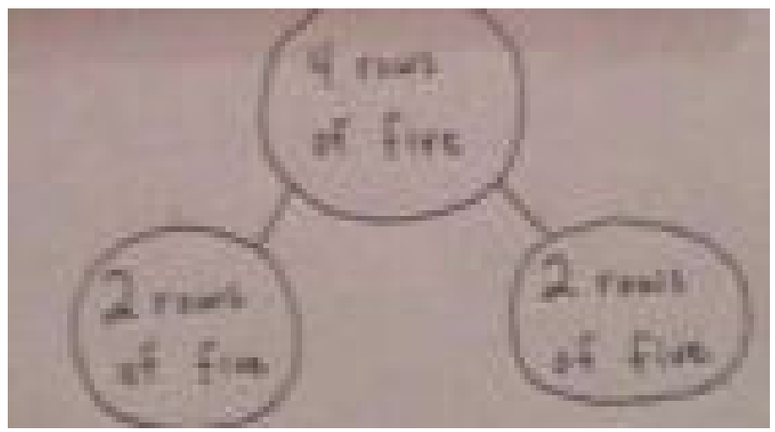
Turn & Talk: How can we decompose this rectangle into ***two equal parts***?

Concept Development

Use your ruler to break your rectangle into two equal parts



How many rows do you have in each part?
How many are in each row?
Record as parts on your number bond.



If 5 + 5 + 5 + 5 respresented the rectangle before we decomposed it, what number sentence can you use to describe each part?
Write your new equations for each part under the part.
Tell your partner the two parts & the whole using a number sentence.

Concept Development

With your partner, use the tiles to build a rectangle with 6 columns of 2.

Tell your partner the total number of tiles in your rectangle and how you know.

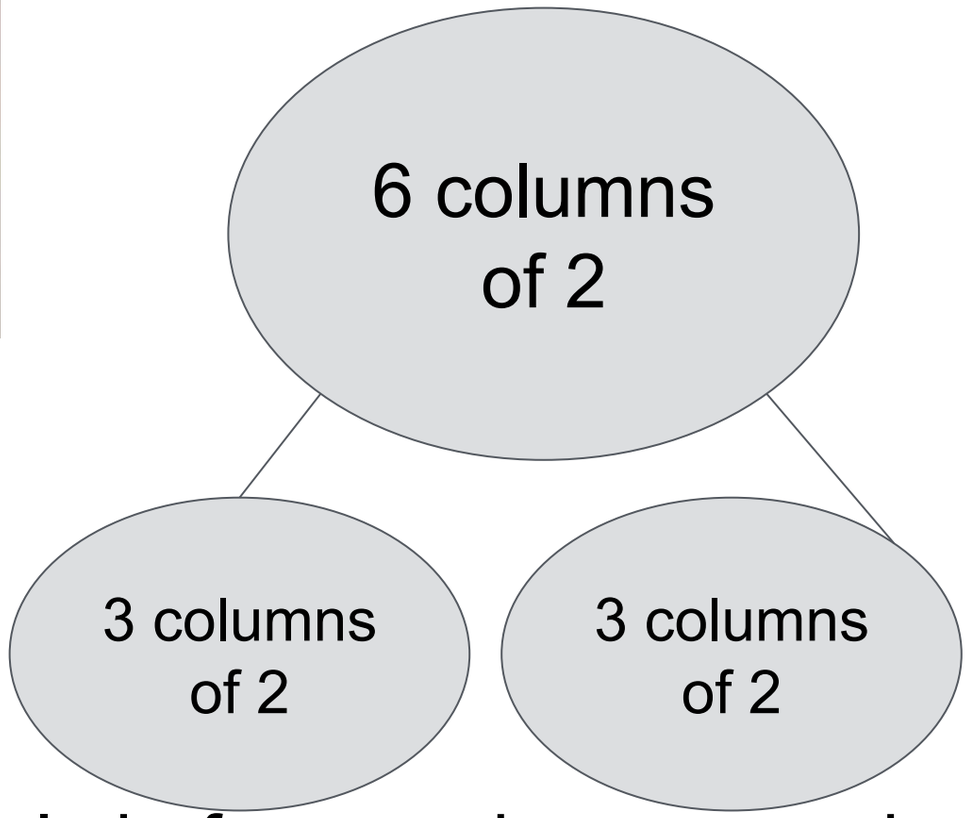
Write the number of rows and the number in each row as the whole number in your number bond.

Turn & Talk: How can we decompose this rectangle into ***two equal parts***?

Concept Development

Use your ruler to break your rectangle into two equal columns

How many columns do you have in each part?
How many are in each row?
Record as parts on your number bond.



If 2 + 2 + 2 + 2 + 2 + 2 respresented the rectangle before we decomposed it, what number sentence can you use to describe each part?
Write your new equations for each part under the part.
Tell your partner the two parts & the whole using a number sentence.

Concept Development

With a partner, count out 16 tiles.

Make a rectangular array with 4 rows.

How many rows did you make?

How many tiles are in each row?

Say the repeated addition sentence.

What do 4 rows of 4 equal?

Remove a row.

Turn & Talk- What is the new total for the rectangle? How do you know?

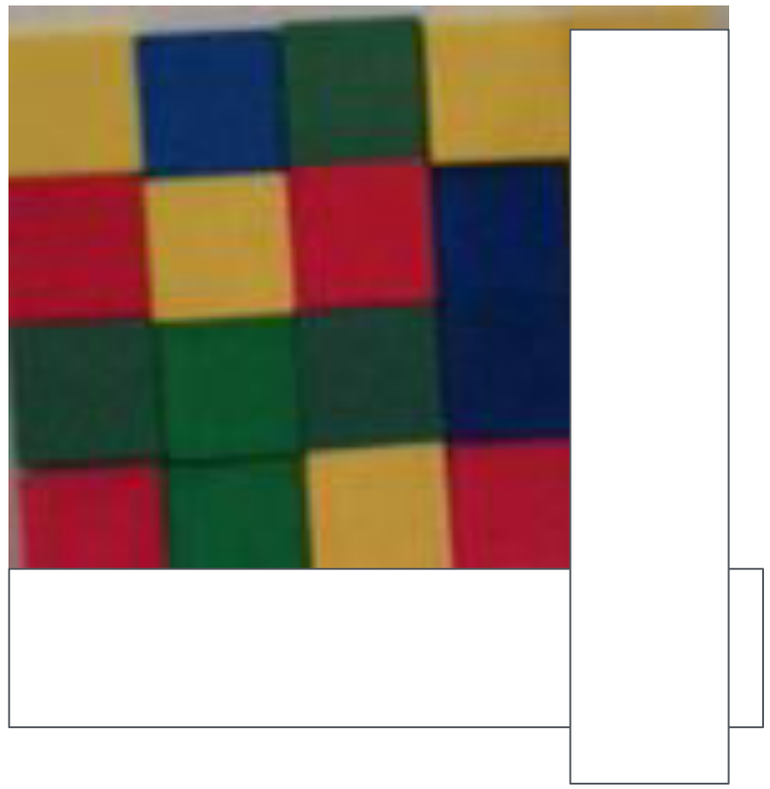
Remove one column.

Turn & Talk- How many tiles do you have now?

Concept Development

With a partner, count out 25 tiles.

Make a rectangular array with 5 rows.



How many rows did you make?

How many tiles are in each row?

Say the repeated addition sentence.

What do 5 rows of 5 equal?

Remove a row

Turn & Talk- What is the new total for the rectangle? How do you know?

Remove one column.

Turn & Talk- How many tiles do you have now?

Application Problem

Ellie bakes a square pan of lemon bars, which she cut into nine equal pieces. Her brothers eat 1 row of her treats. Then, her mom eats 1 column.

a. Draw a picture of Ellie's lemon bars before any are eaten. Write a number sentence to show how to find the total.

b. Write an X on the bars that her brothers eat. Write a new number sentence to show how many are left.

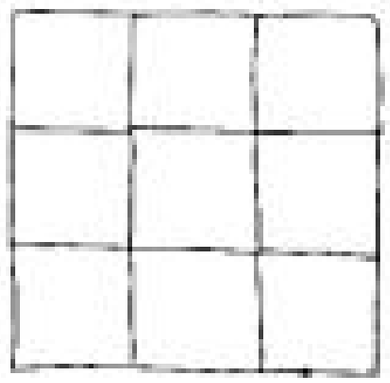
c. Draw a line through the bars that her mom eats. Write a new number sentence to show how many are left.

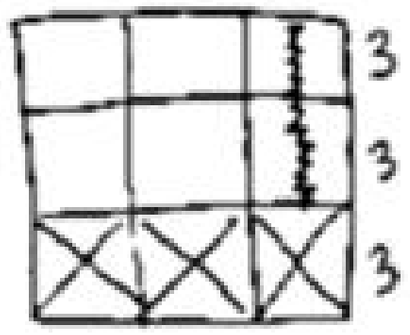
d. How many bars are left? Write a statement.

Application Problem Solutions

a. Draw a picture of Ellie's lemon bars before any are eaten. Write a number sentence to show how to find the total.

3 + 3 + 3 = 9





b. Write an *x* on the bars that her brothers eat. Write a new number sentence to show how many are left.

9 - 3 = 6

c. Draw a line through the bars that her mom eats. Write a new number sentence to show how many are left.

6 - 2 = 4

d. How many bars are left?

There are 4 lemon bars left.

Name _____ Date _____

Use your square tiles to complete the steps for each problem.

Problem 1

Step 1: Construct a rectangle with 4 columns of 3.

Step 2: Separate 2 columns of 3.

Step 3: Write a number bond to show the whole and two parts. Then, write a repeated addition sentence to match each part of the number bond.

Debrief

For problem 3a and 3b, what was your first step in drawing a rectangle?

Explain to your partner how to draw a rectangle with one square tile. Why was precision important today? How is this different from drawing an array with X's.

For problems 1 and 2, discuss with your partner how the repeated addition equation related to the number of units in each rectangle.

Debrief

What was challenging about drawing a rectangle without tracing the square tile in problem 3? What did you need to be sure to do?

How does your drawing a rectangle support the idea of compsing a larger unit from smaller units? Use the terms *square*, *rows*, and *columns* in your response.

Exit Ticket

Name _____ Date _____

Draw an array of 3 columns of 3 starting with the square below without gaps or overlaps.