Eureka Math

3rd Grade
Module 1
Lesson 3

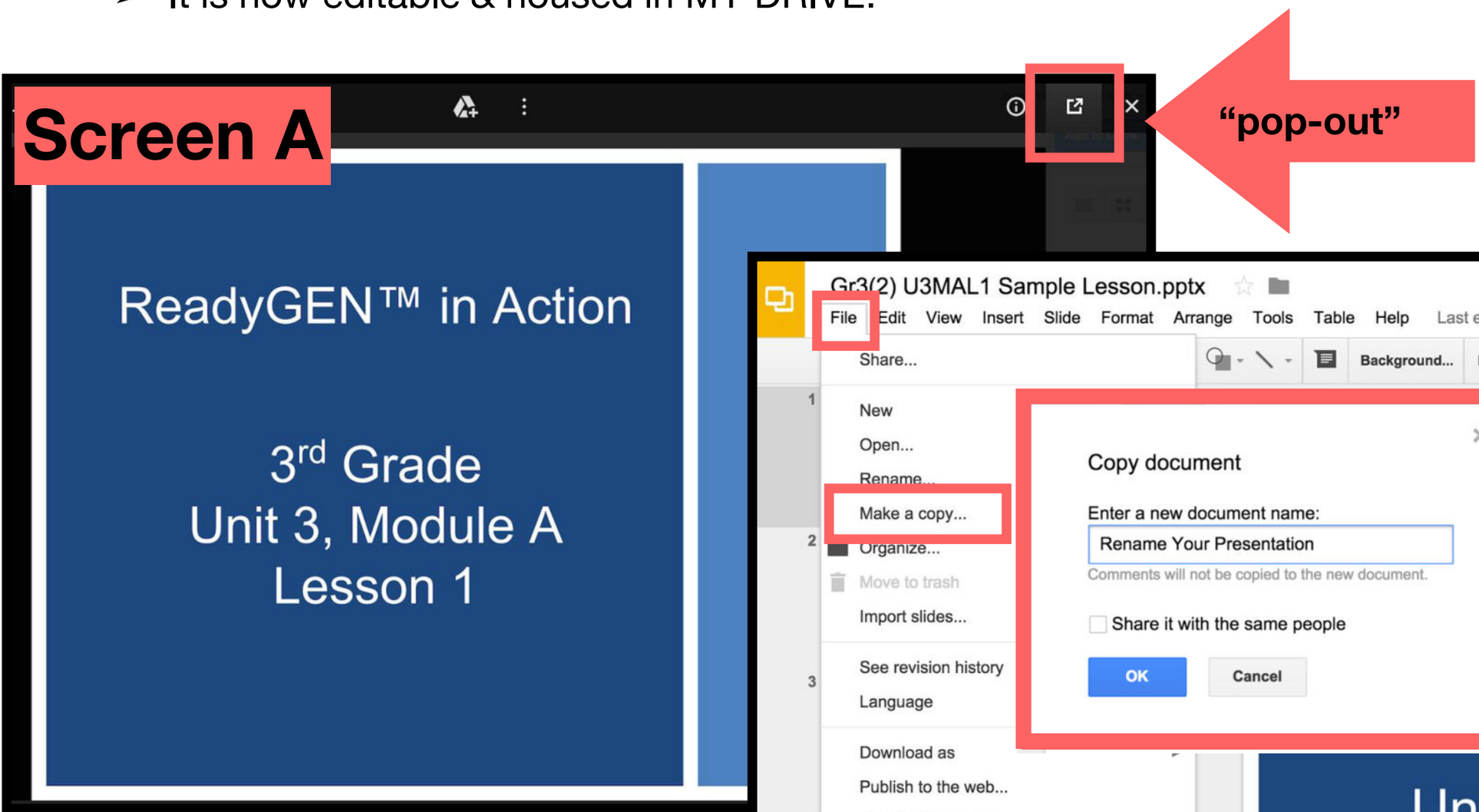
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

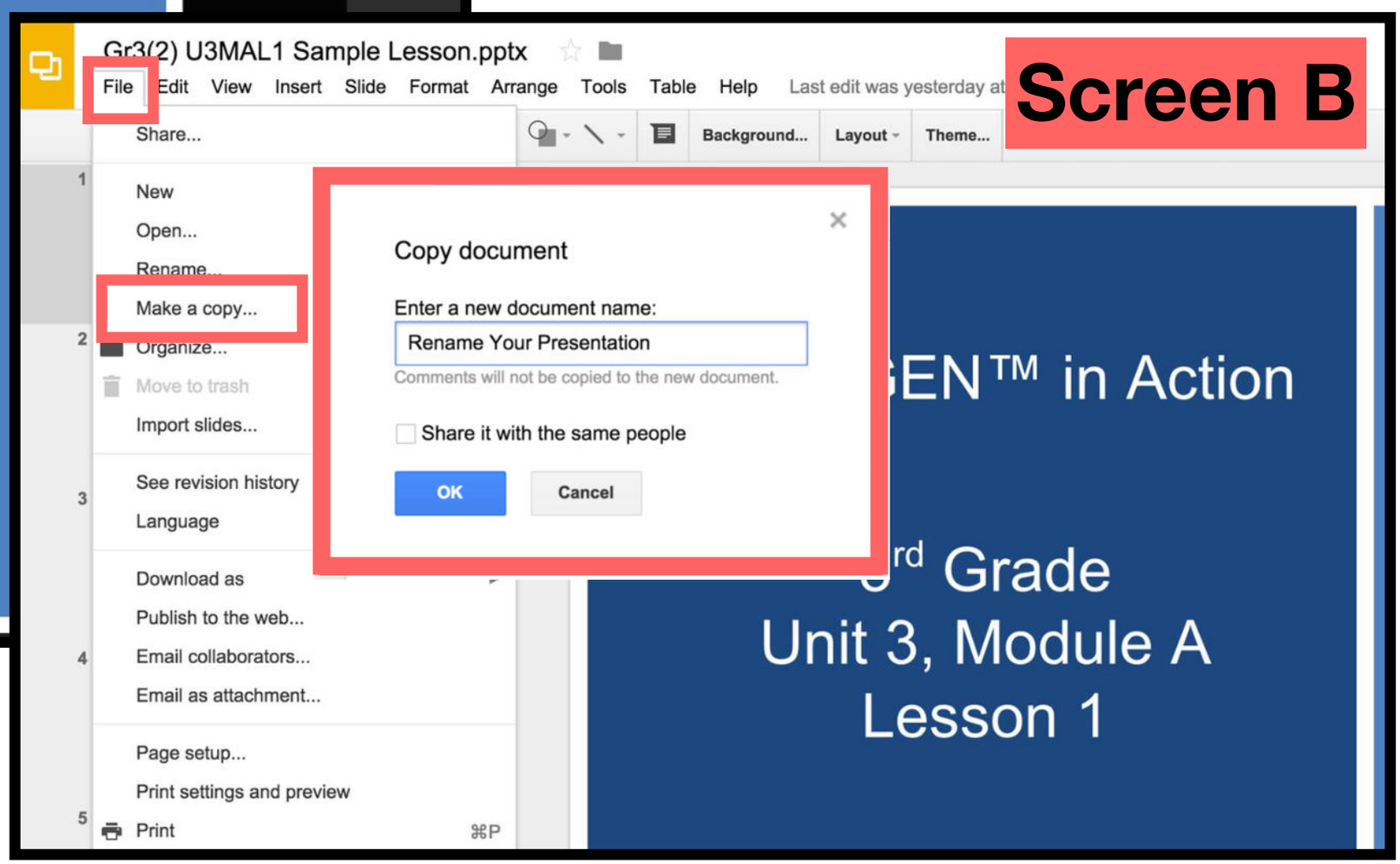
Directions for customizing presentations are available on the next slide.

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.



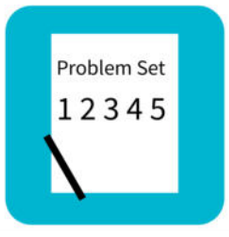


Icons

Read, Draw, Write

Learning Target

Personal White Board

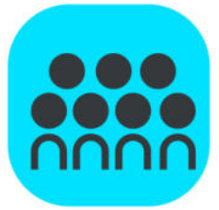


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

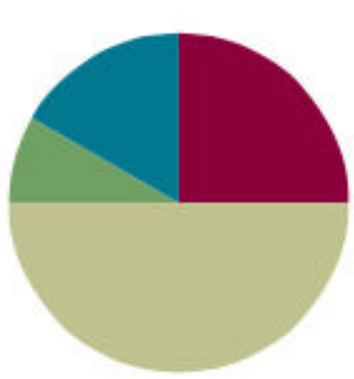
Small Group Time

Lesson 3

Objective: Interpret the meaning of factors—the size of the group or the number of groups.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Application Problem	(5 minutes)
Concept Development	(30 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can interpret the meaning of factors -- the size of the group or the number of groups.

Sprint: Add Equal Groups

Put your name on side A.

Hold your pencil in the air to show you are ready.

When your teacher says, “Go”, begin solving.

Keep working to solve as many problems as you can.

When your teacher says, “Stop”, stop answering problems and hold your pencil in the air.

A

Number Correct: _____

Add Equal Groups

1.	2 + 2 =		23.	7 + 7 =	
2.	2 twos =		24.	2 sevens =	
3.	5 + 5 =		25.	9 + 9 =	
4.	2 fives =		26.	2 nines =	

Sprint: Add Equal Groups

Listen and check your work as your teacher reads the correct answers.

Count how many problems you answered correctly and write them in the circle.

Follow the same steps for side B. On side B, try to solve more problems than you did on side A.

B

Number Correct: _____

Improvement: _____

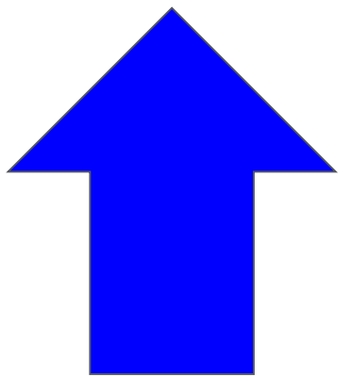
Add Equal Groups

1.	5 + 5 =		23.	8 + 8 =	
2.	2 fives =		24.	2 eights =	
3.	2 + 2 =		25.	7 + 7 =	
4.	2 twos =		26.	2 sevens =	

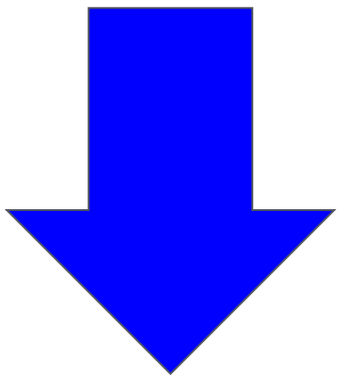
Group Counting

Let's count by **twos**.

Watch my fingers to know whether or not to count up or count down. A closed hand means to stop.



Count up

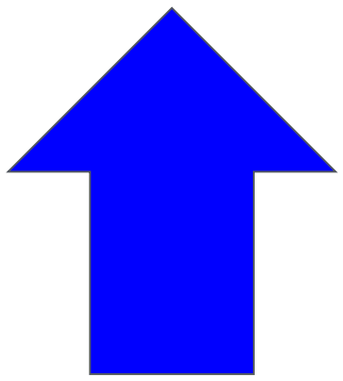


Count down

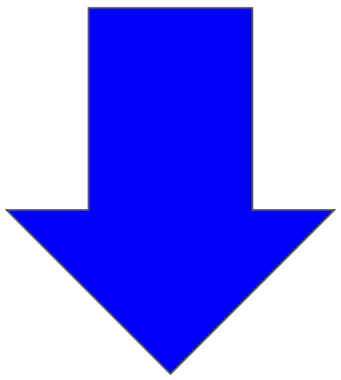
Group Counting

Let's count by **threes**.

Watch my fingers to know whether or not to count up or count down. A closed hand means to stop.



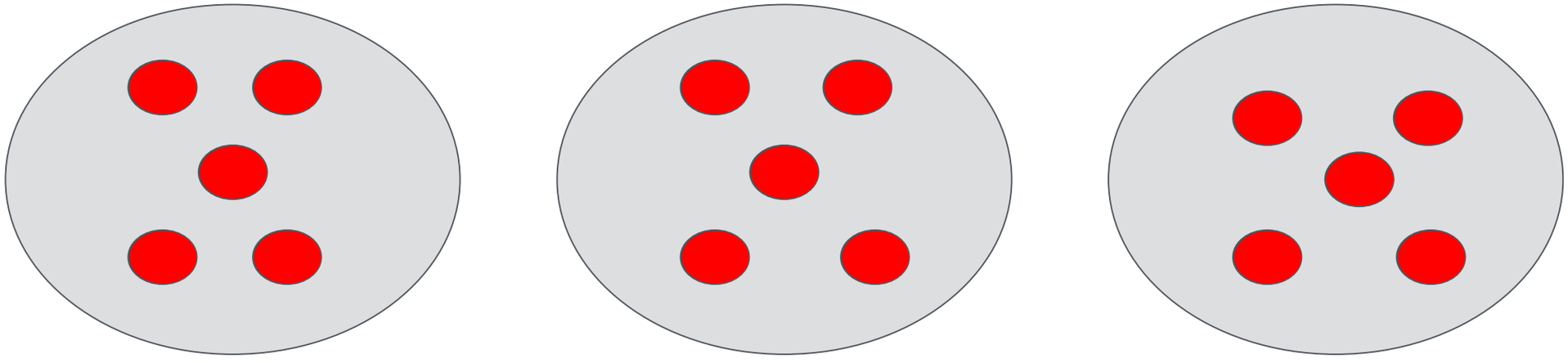
Count up



Count down

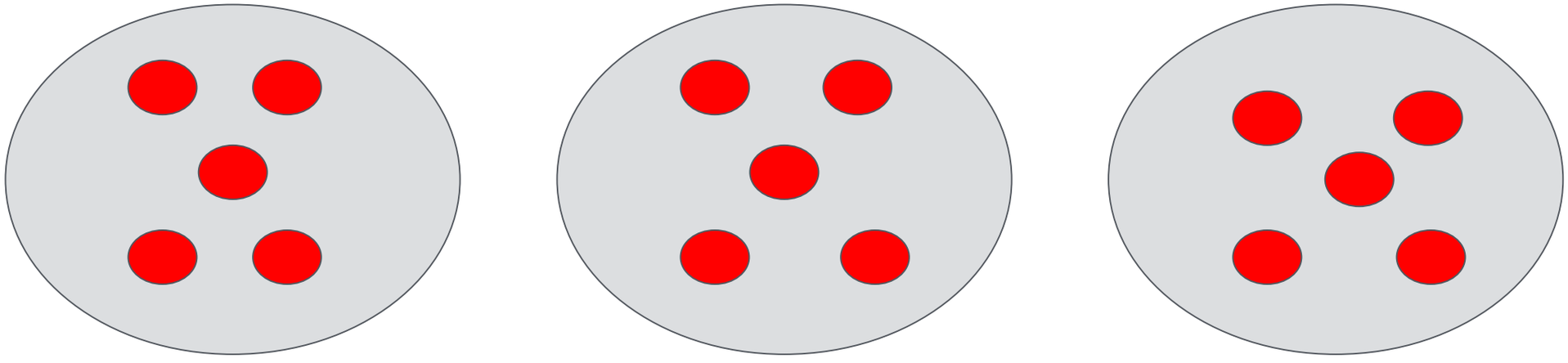
Add to Multiply

How many groups are circled?



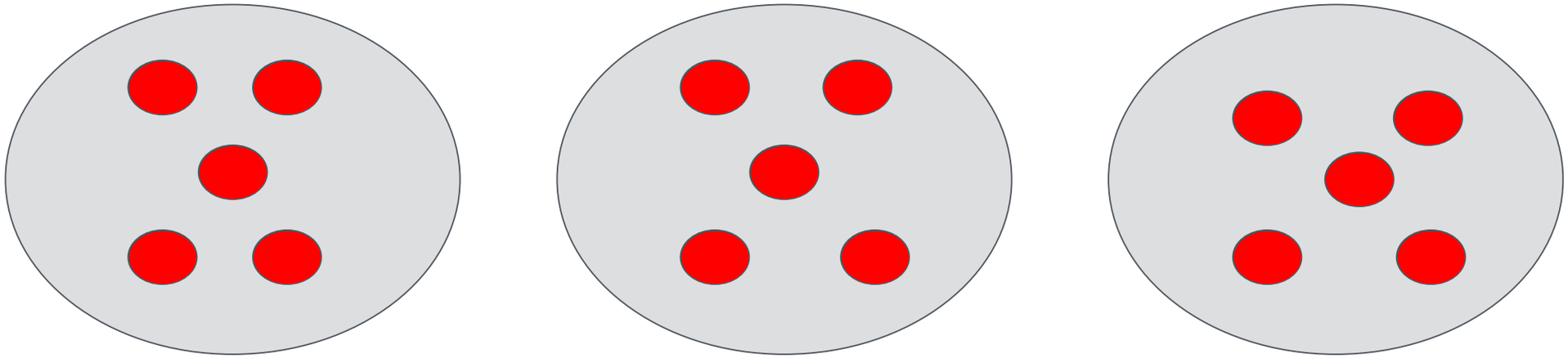
Add to Multiply

How many are there in each group?



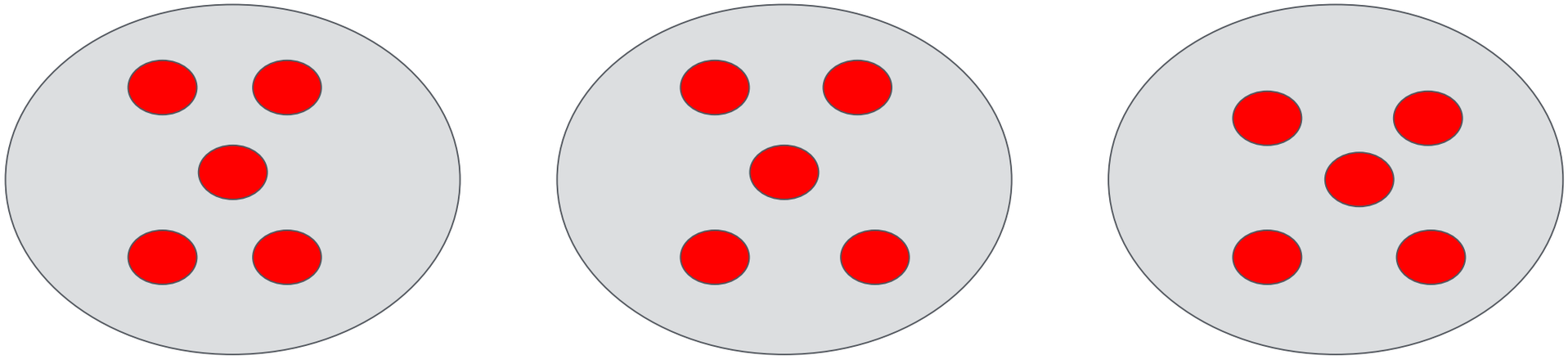
Add to Multiply

Write this as an addition sentence.



Add to Multiply

Write a multiplication sentence representing 3 *fives equals* 15.



Application Problem

Robbie sees that a carton of eggs shows an array with two rows of 6 eggs. What is the total number of eggs in the carton? Use the RDW process to show your solution.

Opening Activity

Here are the rules for our opening activity.

1. **Divide** yourselves into 4 equal groups.
2. Each group will stand into a corner of the room.
3. Divide silently. You can use body movements to gesture, but no words.

Show a thumbs up when your group is ready. Be sure to look around the room to double check that all 4 groups are equal before showing you’re ready.

Opening Activity

At the signal tell how many equal groups we've made.

Opening Activity

4 x _____ = _____

At the signal tell each size of each group.

Opening Activity

4 x _____ = _____

These numbers-- the number of groups and the number in each group-- are called **factors**.

Meaning of Factors

4 x _____ = _____

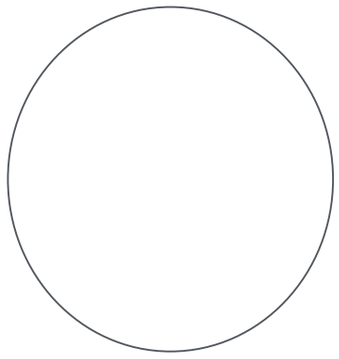
Use the multiplication equation on the board to draw an array.

Make sure that your board is vertical.

Meaning of Factors

4 x _____ = _____

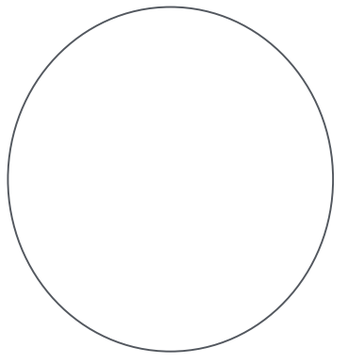
Let's draw a number bond for our equation. Draw a circle with our class total.



Meaning of Factors

4 x _____ = _____

Draw parts coming from the total. Make 1 part to represent each row in our array.



Meaning of Factors

4 x _____ = _____

Show the size of 1 row with your fingers.

Meaning of Factors

4 x _____ = _____

Write a factor representing the size of the group inside the circles.

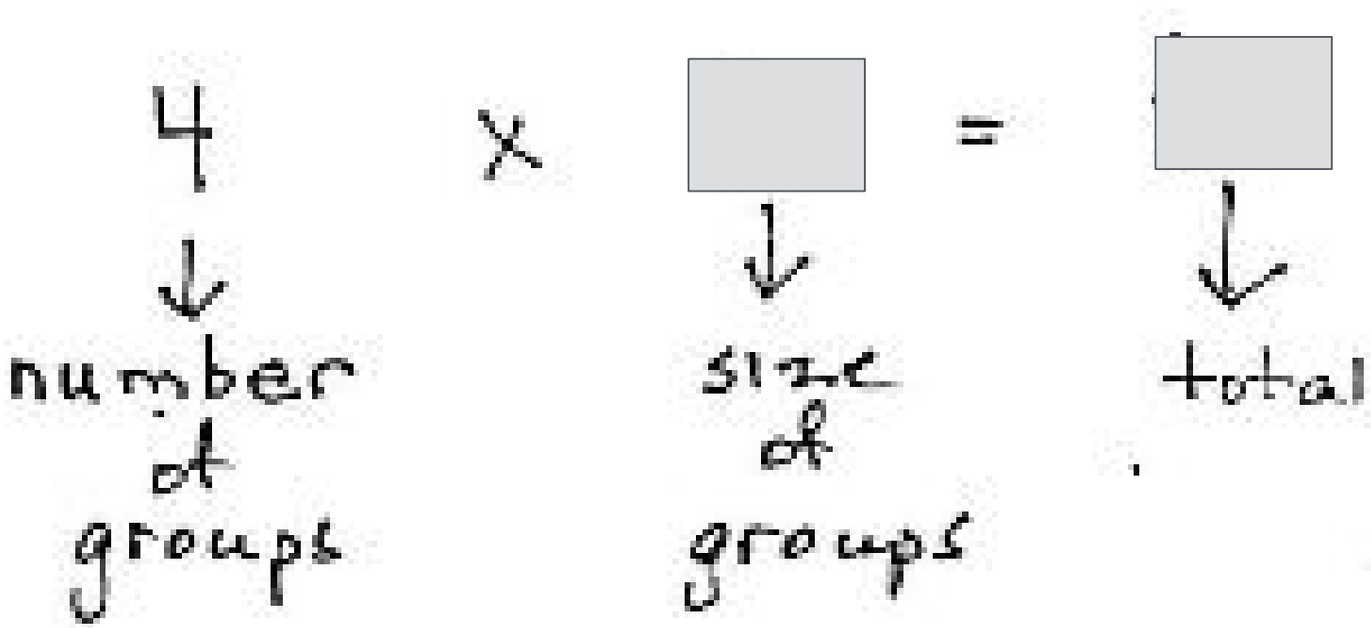
Meaning of Factors

4 x _____ = _____

Look back at the equation. How is the factor 4 represented in the number bond?

Meaning of Factors

Here is the analysis of our equation.



Meaning of Factors

2 x 8 = _____

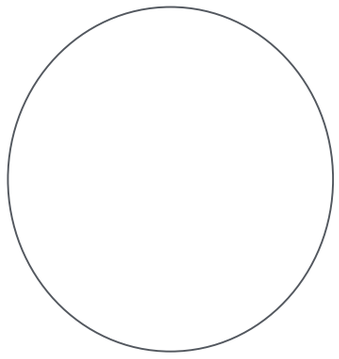
Use the multiplication equation on the board to draw an array.

Make sure that your board is vertical.

Meaning of Factors

2 x 8 = _____

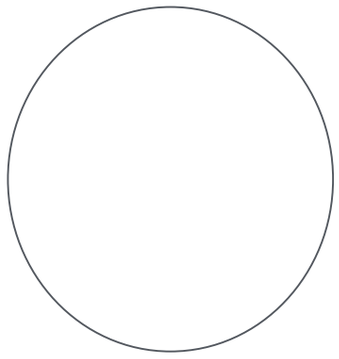
Let's draw a number bond for our equation. Draw a circle with the total.



Meaning of Factors

2 x 8 = _____

Draw parts coming from the total. Make 1 part to represent each row in our array.



Meaning of Factors

2 x 8 = _____

Show the size of 1 row with your fingers.

Meaning of Factors

2 x 8 = _____

Write a factor representing the size of the group inside the circles.

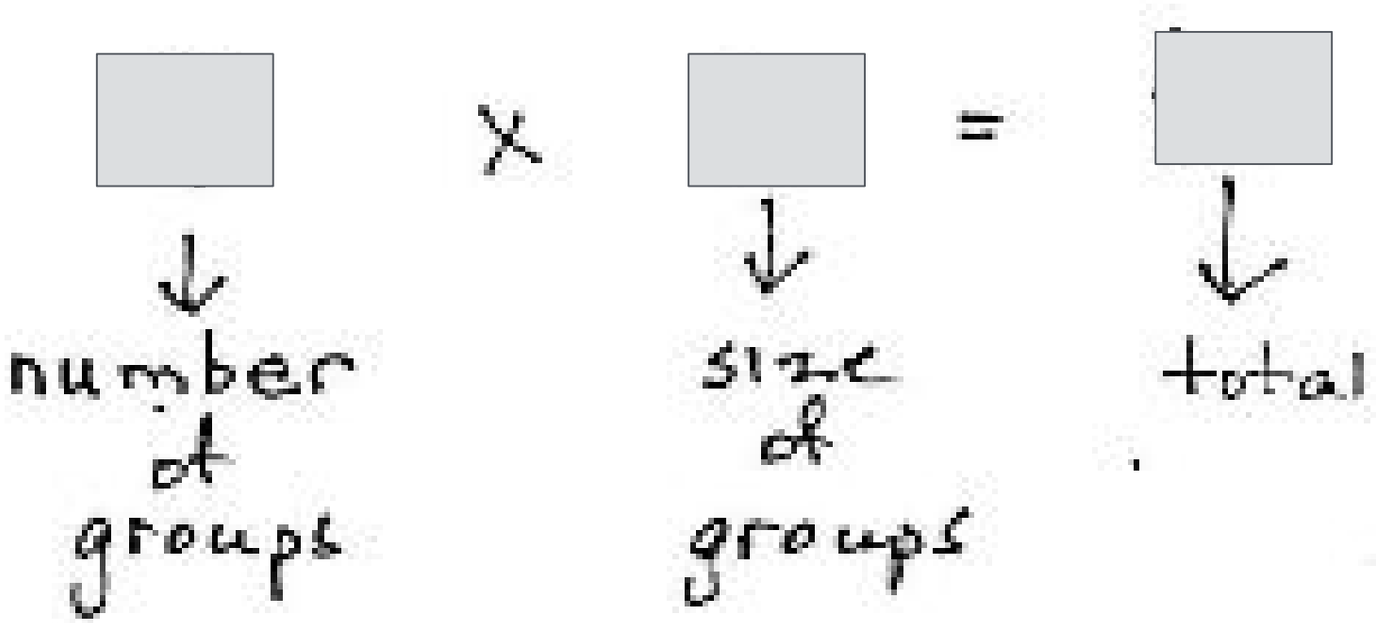
Meaning of Factors

2 x 8 = _____

Look back at the equation. How is the factor 2 represented in the number bond?

Meaning of Factors

Here is the analysis of our equation.



Problem Set

Name _____ Date _____

Solve Problems 1–4 using the pictures provided for each problem.

1. There are 5 flowers in each bunch. How many flowers are in 4 bunches?

a. Number of groups: _____ Size of each group: _____

b. 4 × 5 = _____

c. There are _____ flowers altogether.

Debrief

Why do you think I started the lesson by asking you to **divide** yourselves into equal groups in the corners of the room?

Identify the **factors** and their meanings from each image in Problems 1 - 5.

In Problem 6, discuss the two ways to draw the array and the number bond with factors 2 and 3.

Module 1 introduces many new vocabualry words: *row, array, multiply, multiplicaion, number of groups, size of groups, divide, factor,* etc. Consider having

Exit Ticket

Name _____ Date _____

Draw an array that shows 5 rows of 3 squares. Then, show a number bond where each part represents the amount in one row.