Eureka Math

2nd Grade
Module 6
Lesson 17

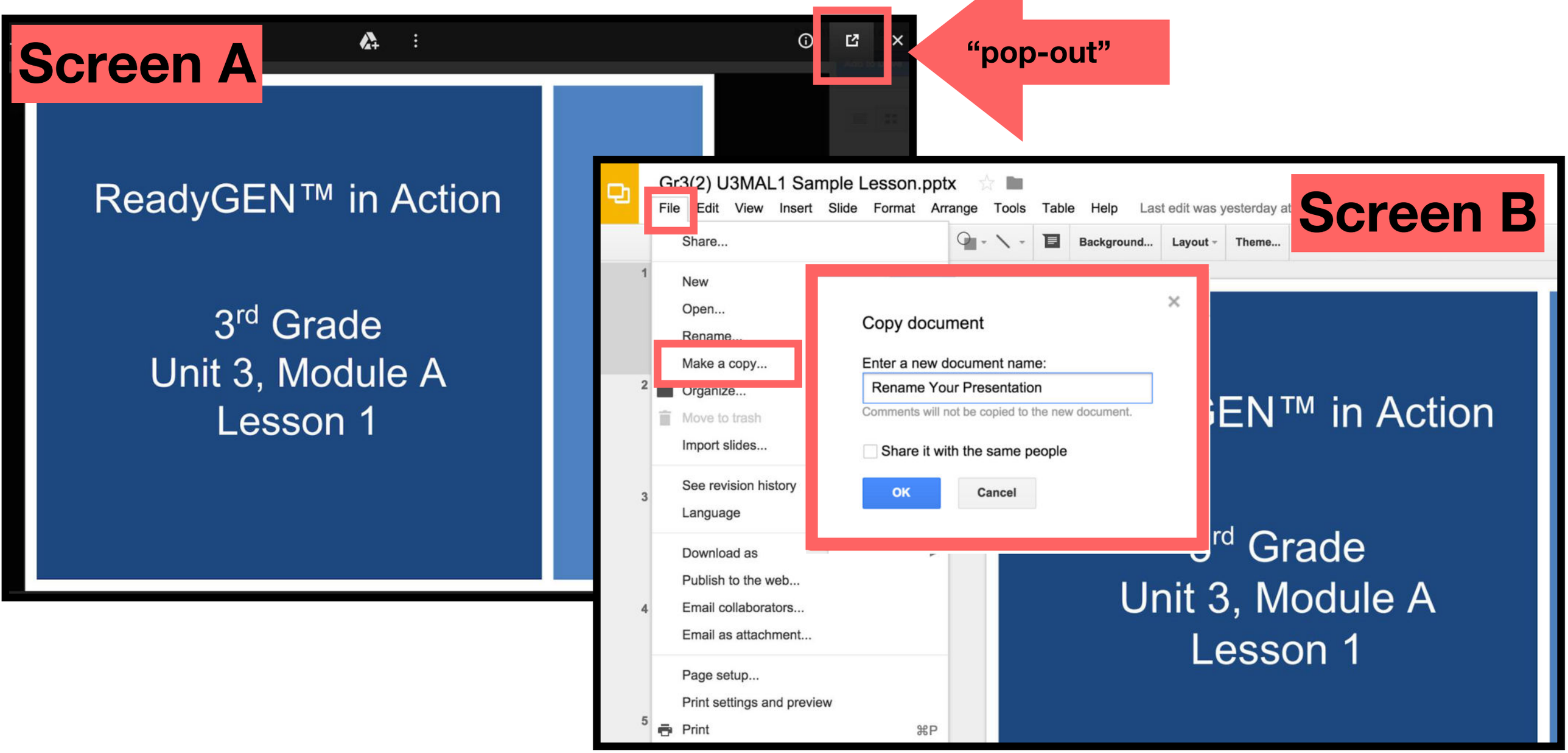
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

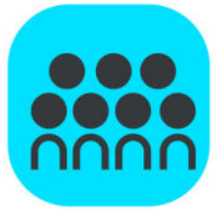
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

Materials Needed:

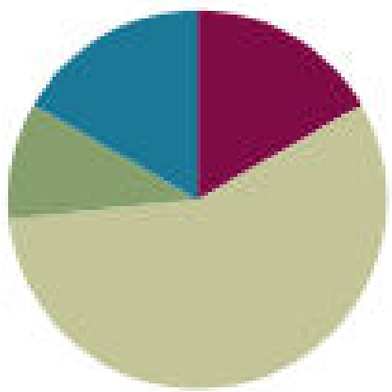
- White board
- Notebook
- 20 counters per pair

Lesson 17

Objective: Relate doubles to even numbers, and write number sentences to express the sums.

Suggested Lesson Structure

Fluency Practice	(10 minutes)
Application Problem	(6 minutes)
Concept Development	(34 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use *doubles* to find even numbers and then write number sentences about the math facts I learned.

Subtraction Patterns

We are going to solve some subtraction problems, then use what we know to solve similar problems…

First, what is 11 - 9?

How can we use that fact to solve 21 - 9? 31 - 9? 41 - 9?

Keep following that pattern on your white board...

Continue with…12 – 8, 11 – 8, and 13 – 9

Core Fluency Practice

Continue working on the core fluency skills.

Application Problem

Seven students sit on one side of a lunch table. Seven more students sit across from them on the other side of the table.

a. Draw an array to show the students.

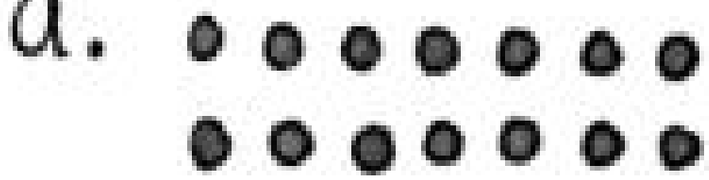
b. Write an addition equation that matches the array. Three more students sit down on each side of the table.

c. Draw an array to show how many students there are now.

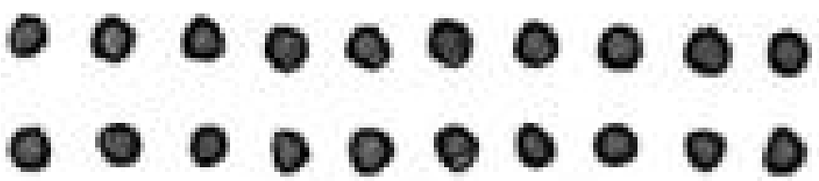
d. Write an addition equation that matches the new array.

Application Problem

Seven students sit on one side of a lunch table. Seven more students sit across from them on the other side of the table.

a. 

b. 7 + 7 = 14

c. 

d. 10 + 10 = 20

Concept Development

Put your hands on the table, and put up one finger on each hand...what is the math problem you are showing?

How about 2 fingers from each hand?

3 fingers? 4 fingers? 5 fingers?

What do we call it when both addends are the same?

DOUBLES

Concept Development

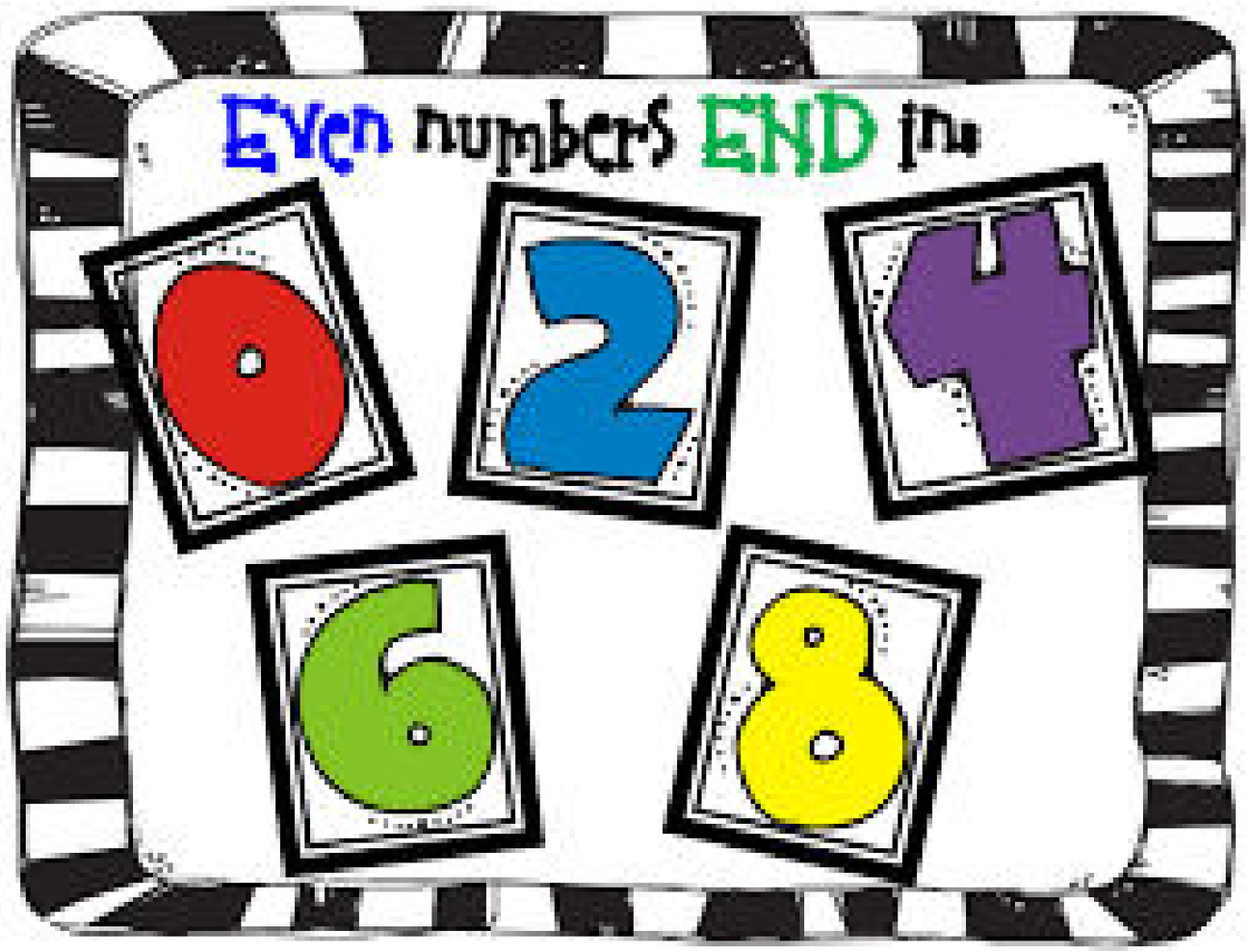
1 + 1 = 2

2 + 2 = 4

3 + 3 = 6

4 + 4 = 8

5 + 5 = 10



Can you see a pattern in the totals of our doubles facts?

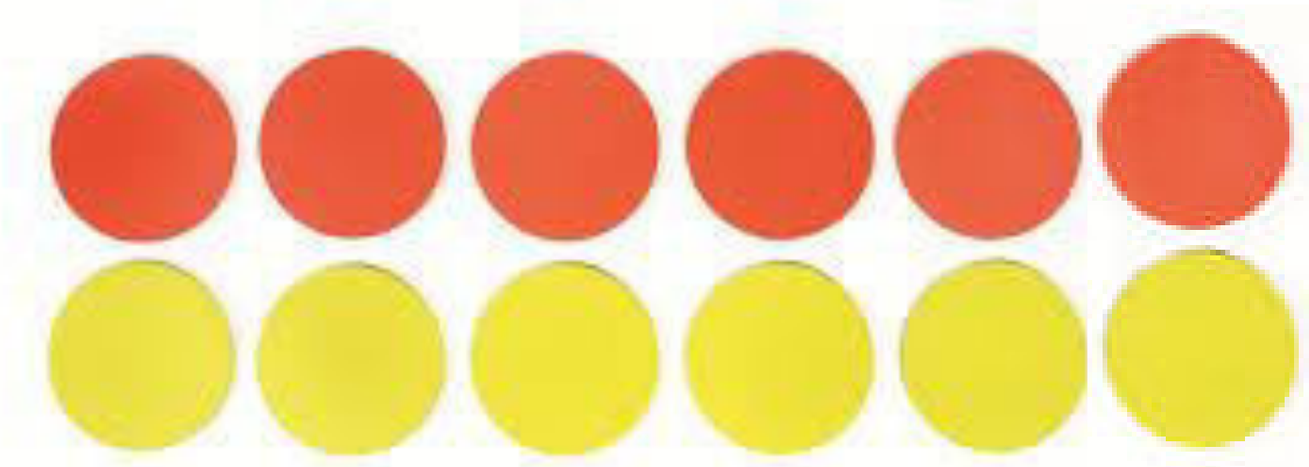
All of these totals are *even numbers.* What can we say about even numbers?

Concept Development

We’re going to use counters to find out more about even numbers.

Partner 1, make a row of 6 counters.
Partner 2, do the same thing.

Describe your array with an addition equation.

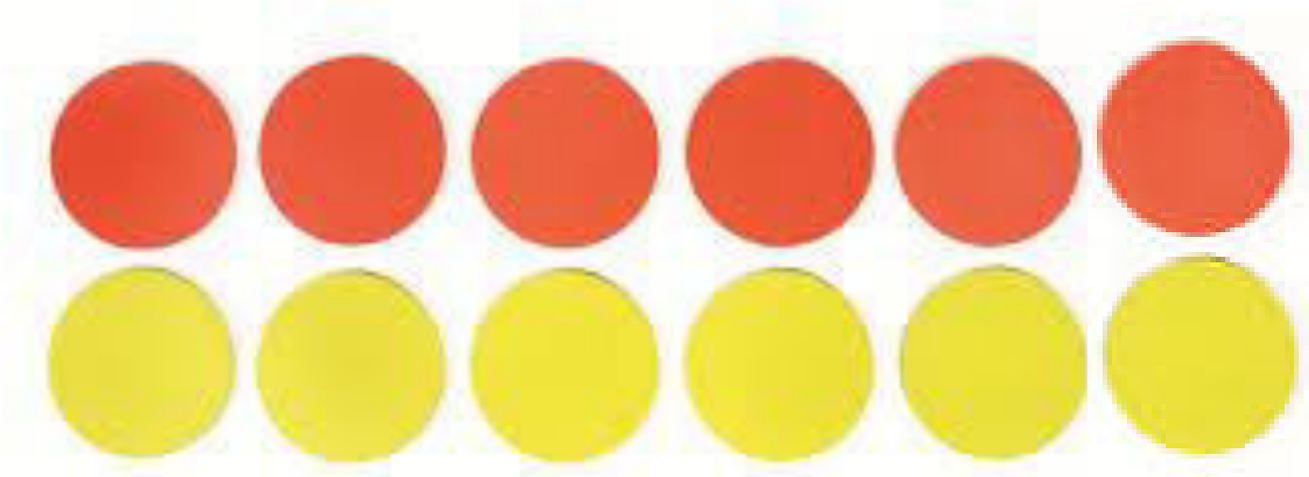


Concept Development

We can say this math fact in another way:

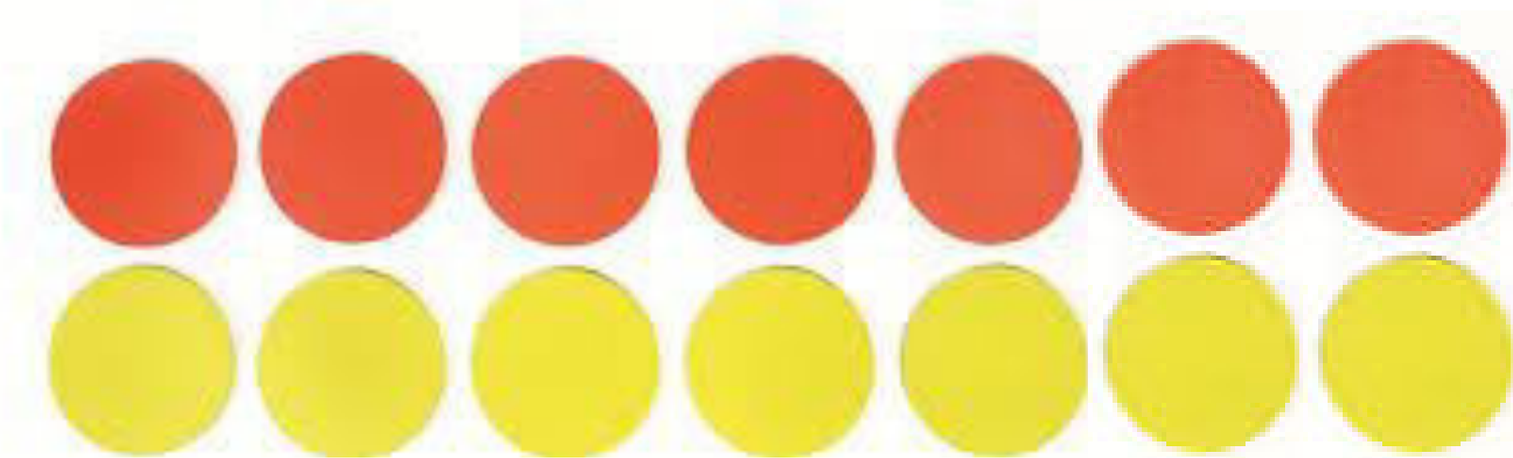
6 doubled is 12

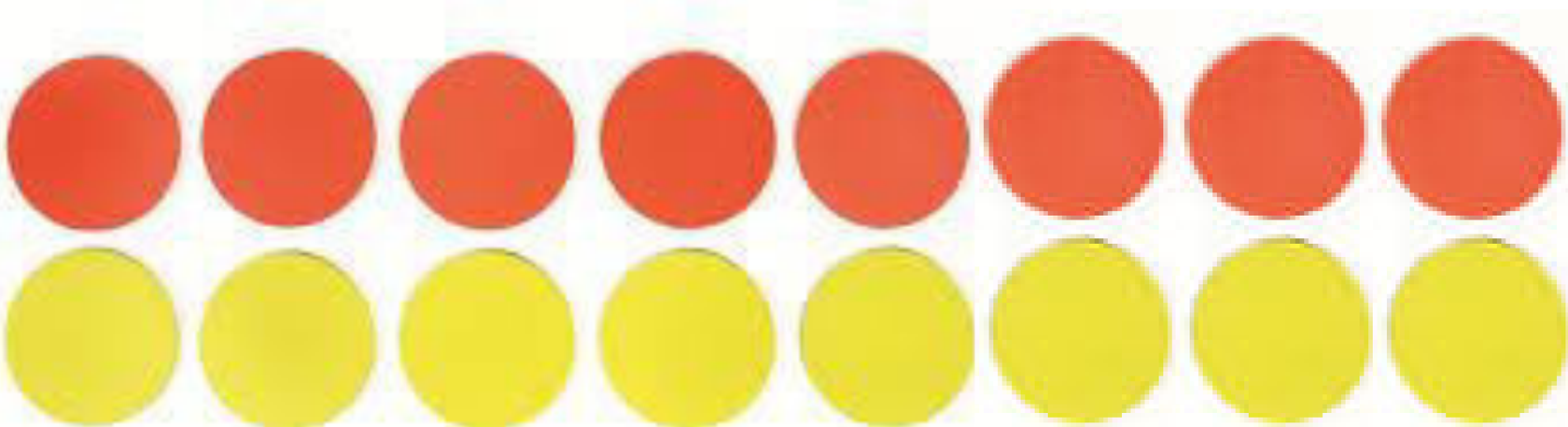
is the same as 6 + 6 = 12



Concept Development

We’re going to keep doing this. We’ll add a counter to each row and make a new addition equation each time to see how many even numbers we can find using doubles facts.



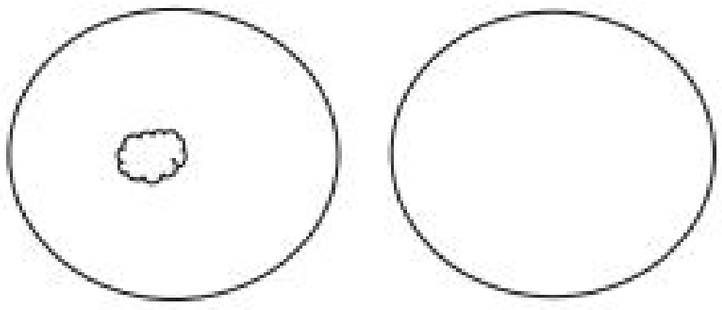


__ = ____

Problem Set

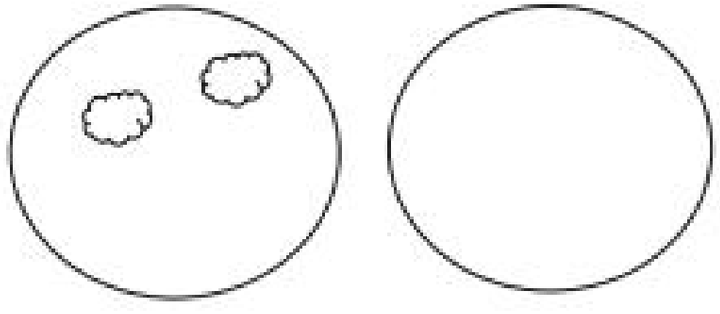
Name _____ Date _____

1. Draw to double the group you see. Complete the sentence, and write an addition equation.

a. 

There is _____ cloud in each group.

_____ + _____ = _____

b. 

There are _____ clouds in each group.

_____ + _____ = _____

Debrief

- In Problem 1, does doubling a number always result in an **even number**? Does it matter how many clouds are in each group?
- For Problem 1, if 4 + 4 is even, is 5 + 4 even? Why not? Fill in 5 + 4 + ____ is an even number.
- Can you look at an array in Problem 2 and immediately determine if there is an even number of objects? How?
- What patterns do you notice in Problem 3? What connections do you see between even numbers and skip-counting?
- What new math word did we use today? How would you define an even number?
- How did the Application Problem connect to today's lesson?

Exit Ticket

Name _____ Date _____

Draw an array for each set. Complete the sentences.

a. 2 rows of 5

2 rows of 5 = _____

_____ + _____ = _____

Circle one: 5 doubled is even/not even.