Materials List

(S) Mixed Multiplication Sprint
(S) Personal white board, problem set

Eureka Math

3rd Grade
Module 3
Lesson 1

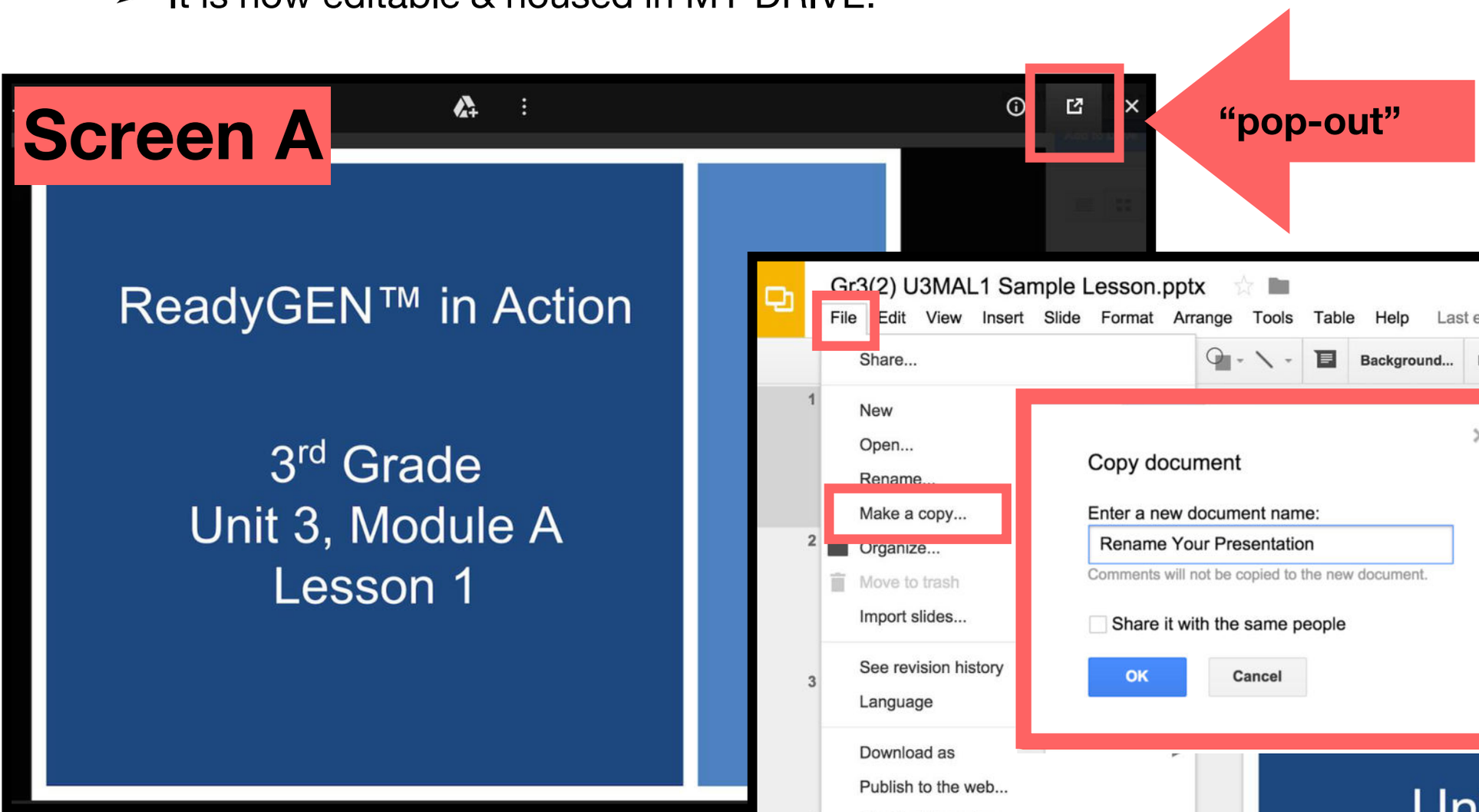
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

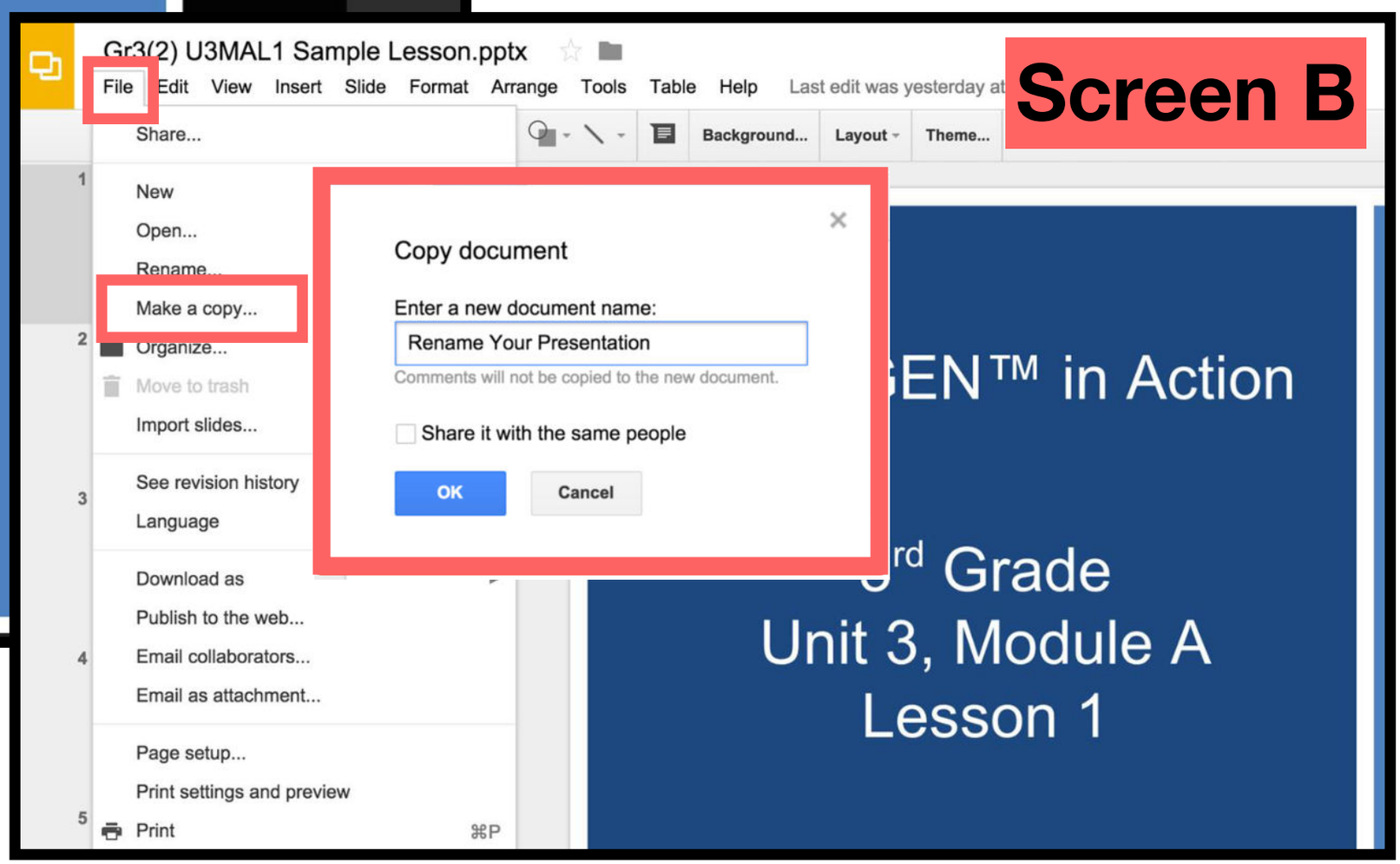
Directions for customizing presentations are available on the next slide.

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.



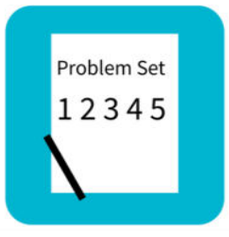


Icons

Read, Draw, Write

Learning Target

Personal White Board

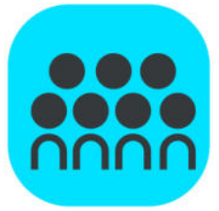


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

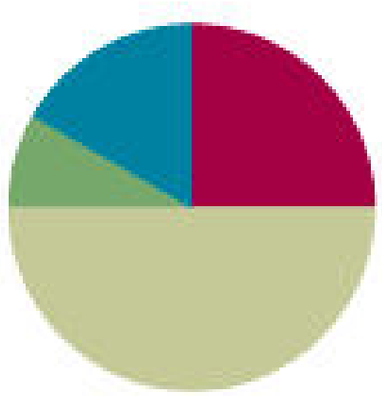
Small Group Time

Lesson 1

Objective: Study commutativity to find known facts of 6, 7, 8, and 9.

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 study commutativity to find known facts of 6, 7, 8, and 9.

Sprint: Mixed Multiplication

Number Correct: _____

A

Mixed Multiplication

1.	2 × 1 =	
2.	2 × 2 =	
3.	2 × 3 =	
4.	4 × 1 =	
5.	4 × 2 =	
6.	4 × 3 =	
7.	1 × 6 =	
8.	2 × 6 =	
9.	1 × 8 =	

23.	2 × 7 =	
24.	5 × 5 =	
25.	5 × 6 =	
26.	5 × 7 =	
27.	4 × 5 =	
28.	4 × 6 =	
29.	4 × 7 =	
30.	3 × 5 =	
31.	3 × 6 =	

Group Counting

Sixes to 60

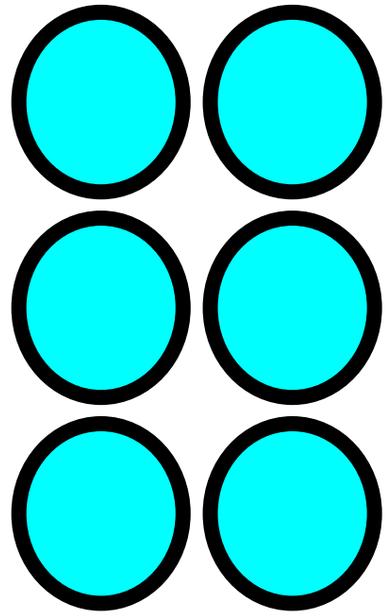
Sevens to 70

Eights to 80

Nines to 90

Commutative Property of Multiplication

Write two multiplication sentences and two division sentences for this array.



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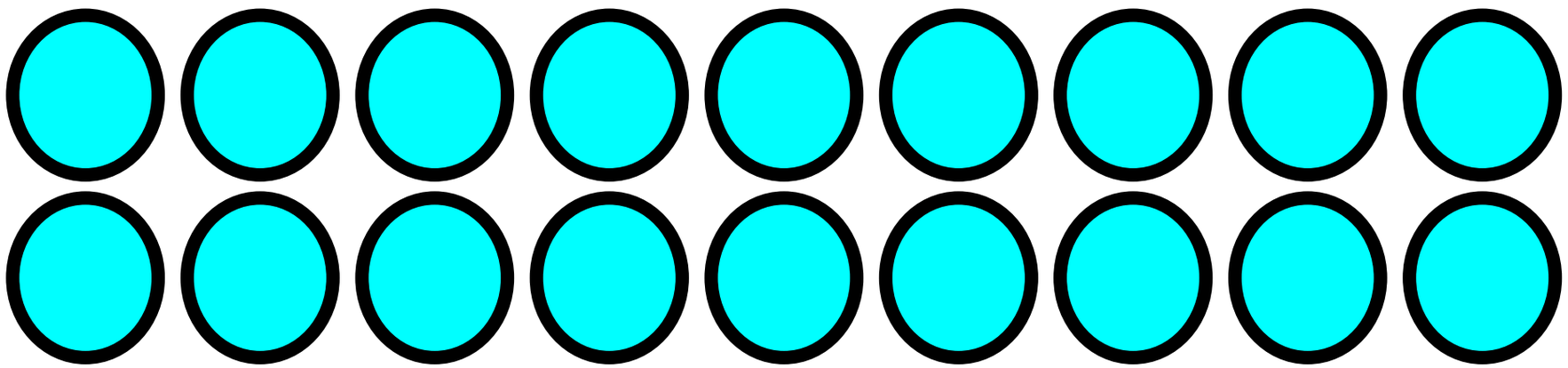

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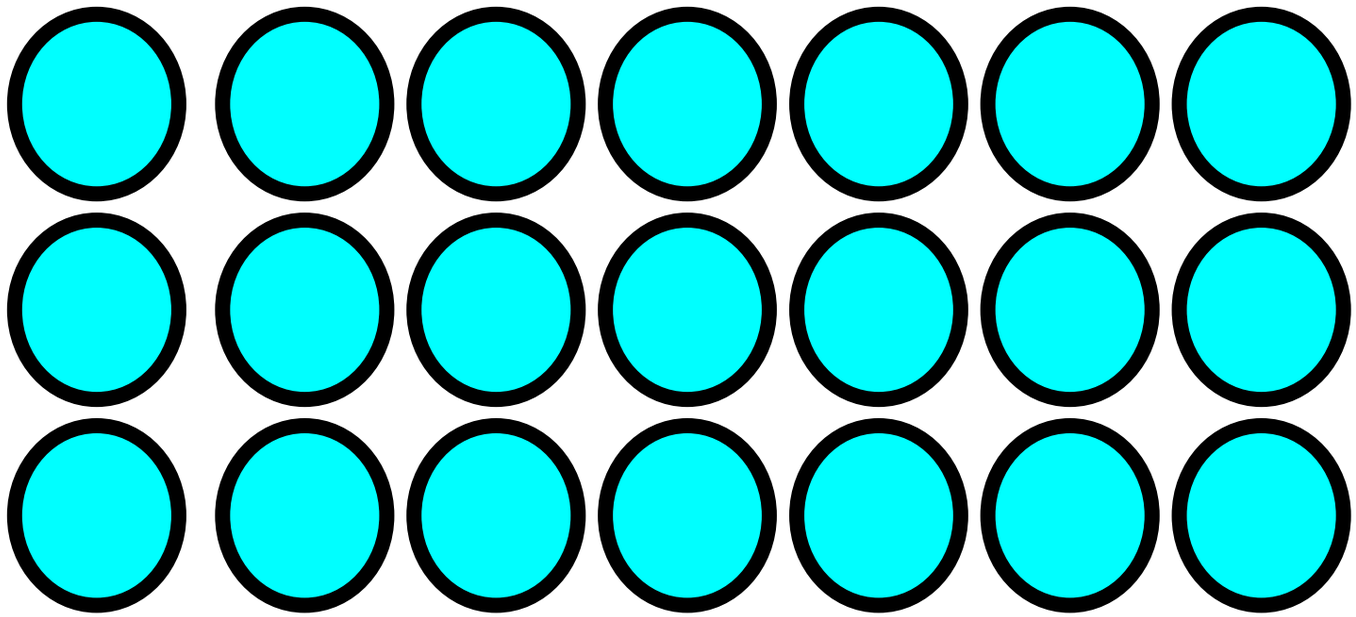

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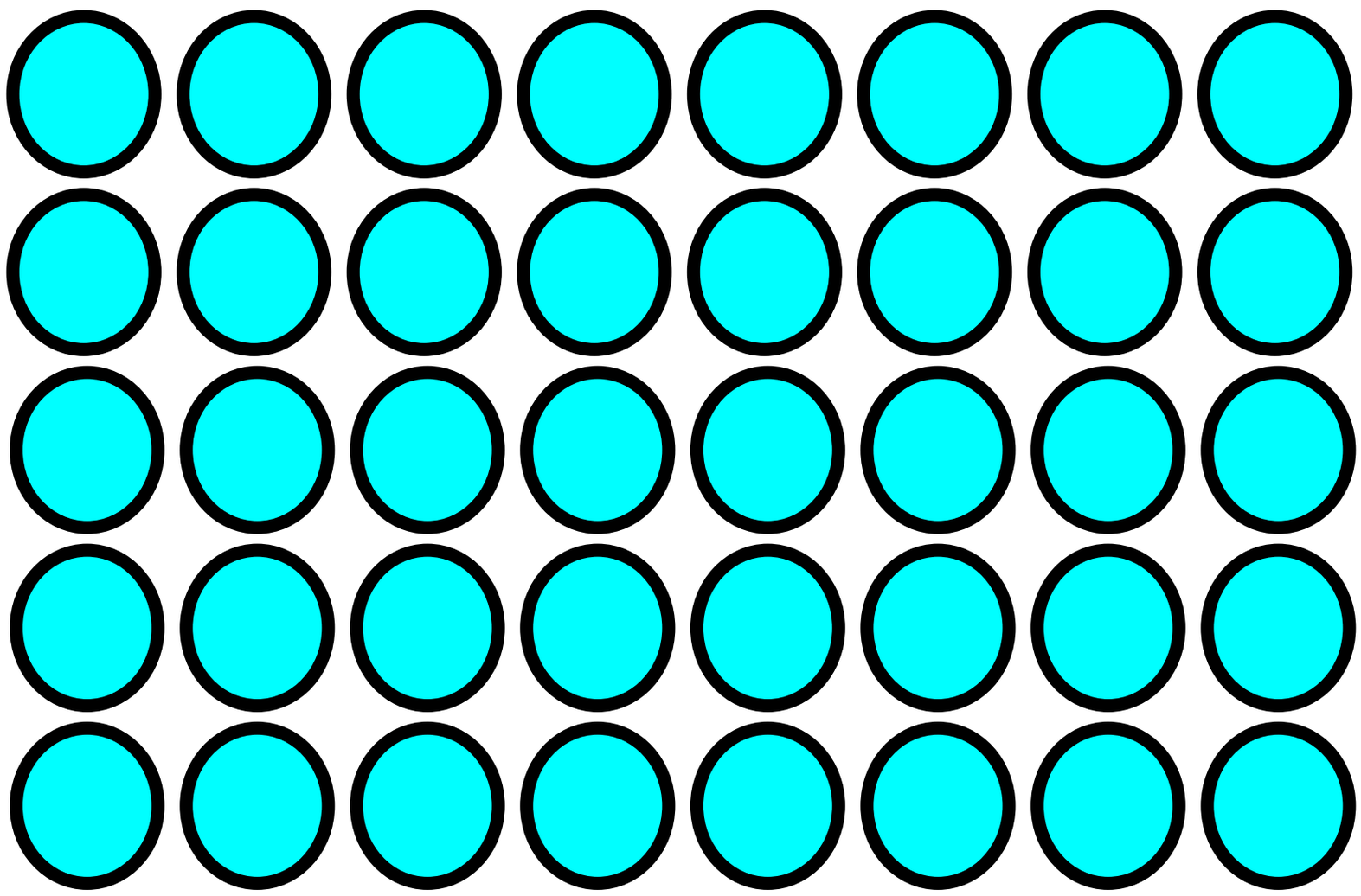
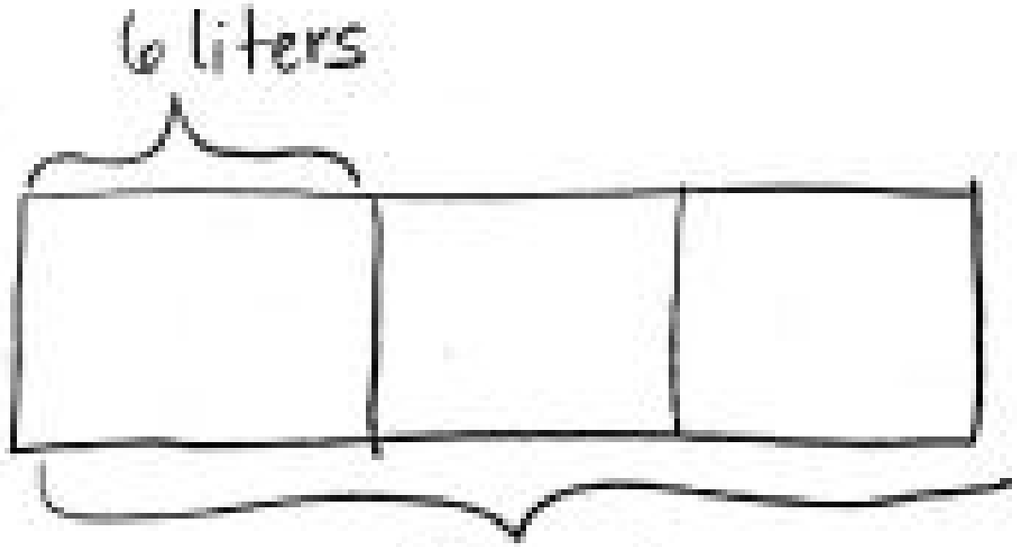


Application Problem

Geri brings 3 water jugs to her soccer game to share with teammates. Each jug contains 6 liters of water. How many liters of water does Geri bring?

Application Problem



$3 \times 6 = 18$

Geri brings 18 liters of water for her team.

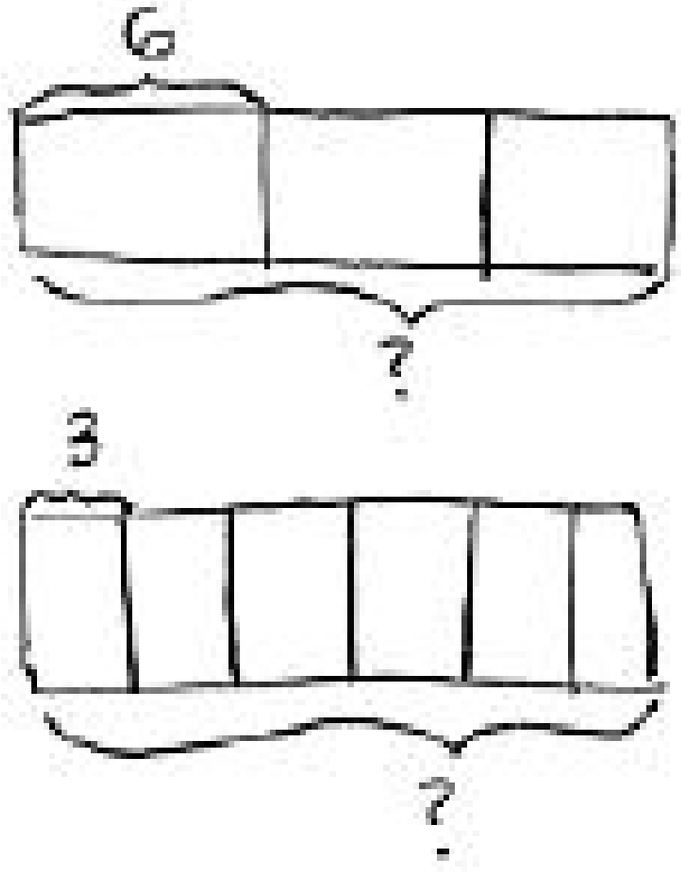
Concept Development

Part 1: Explore commutativity as it relates to multiplication.

Talk to your partner.

Which tape diagram represents the Application Problem?

How do you know?



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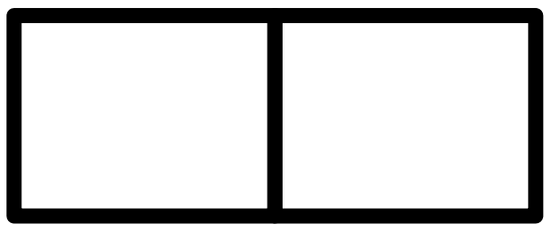

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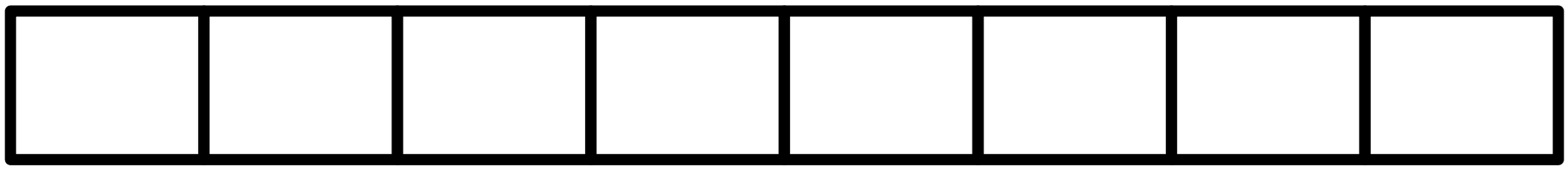

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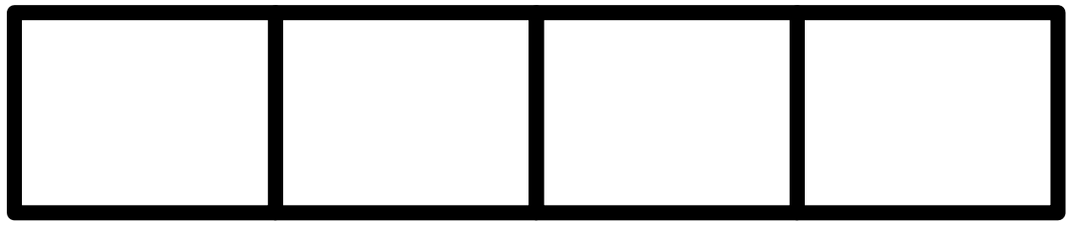


Problem Set
1 2 3 4 5

Concept Development

Part 2: Use the multiplication chart to find known facts through commutativity.

Name _____ Date _____

1. a. Solve. Shade in the multiplication facts that you already know. Then, shade in the facts for sixes, sevens, eights, and nines that you can solve using the commutative property.

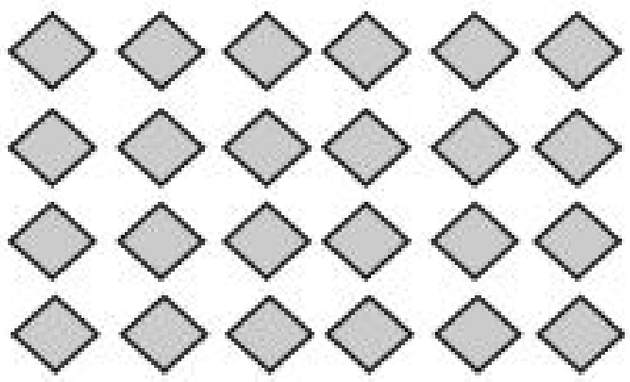
×	1	2	3	4	5	6	7	8	9	10
1		2	3							
2		4		8				16		
3						18				
4					20					
5										50
6		12								
7										
8										
9										
10										

Problem Set

b. Complete the chart. Each bag contains 7 apples.

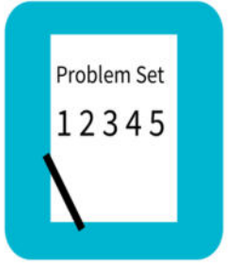
Number of Bags	2		4	5	
Total Number of Apples		21			42

2. Use the array to write two different multiplication sentences.



_____ = _____ × _____

_____ = _____ × _____



Student Debrief

Lesson Objective: Study commutativity to find known facts of 6, 7, 8, and 9.

How did commutativity help you solve more facts than you thought you knew in Problem 1(a)?

Who would like to share their processes for finding the multiplication facts for the array in Problem 2.

In Problems 3(a), 3(b), and 3(c), what do you notice about the words and numbers on each side of the equal sign? How are they related?

How did you know to subtract 1 three in Problem 3(g)? What would that problem look like rewritten as an equation?

Exit Ticket

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.

Name _____ Date _____

1. Use the array to write two different multiplication facts.

_____ = _____ × _____

_____ = _____ × _____

2. Karen says, "If I know 3 × 8 = 24, then I know the answer to 8 × 3." Explain why this is true.