Materials List

(S) Personal white board

Eureka Math

3rd Grade
Module 3
Lesson 10

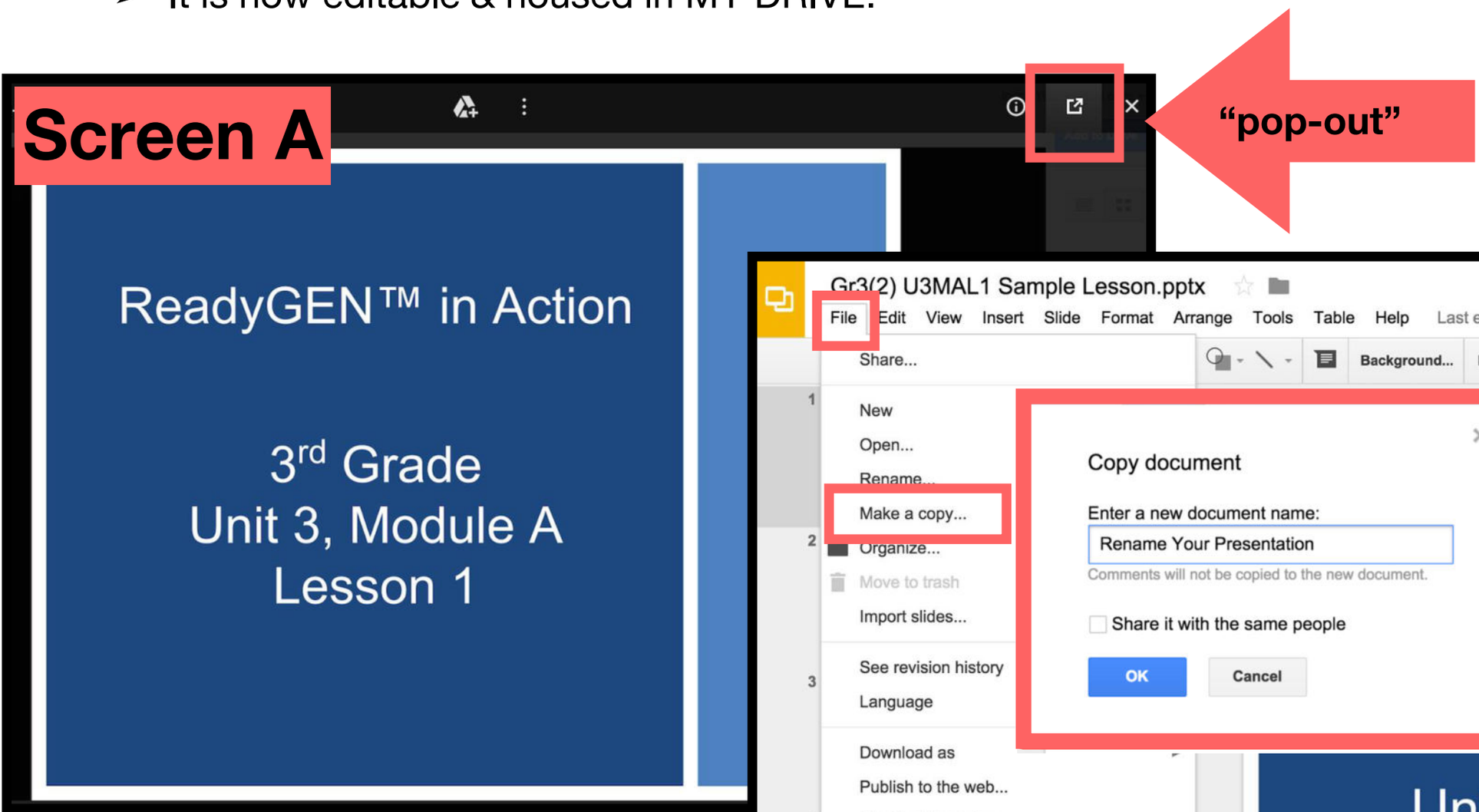
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

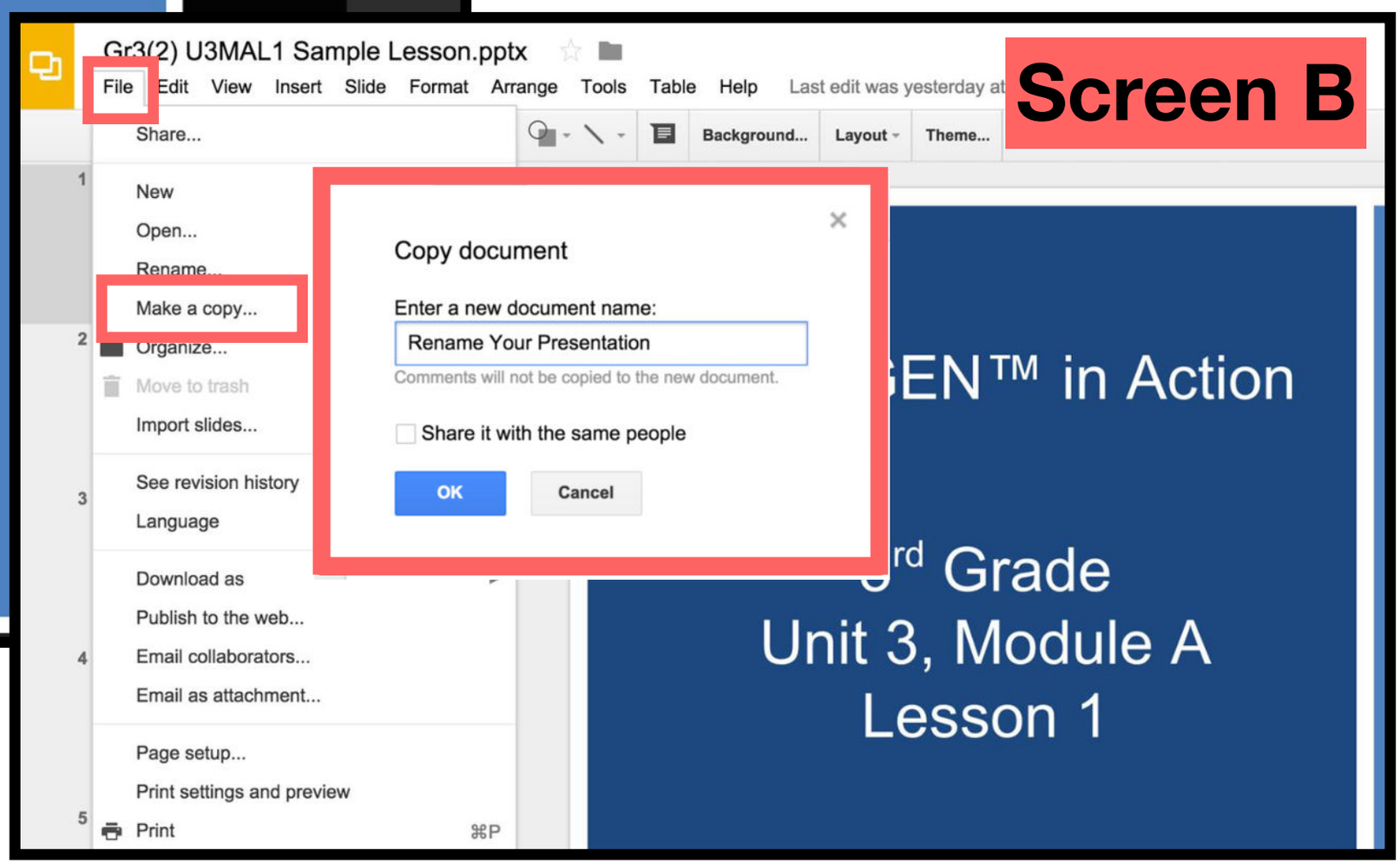
Directions for customizing presentations are available on the next slide.

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

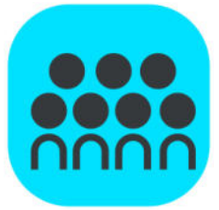
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

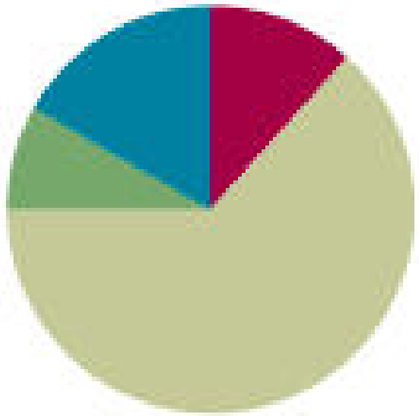
Small Group Time

Lesson 10

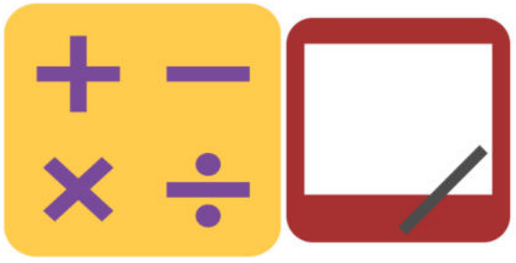
Objective: Use the distributive property as a strategy to multiply and divide.

Suggested Lesson Structure

Fluency Practice	(7 minutes)
Application Problem	(5 minutes)
Concept Development	(38 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use the distributive property as a strategy to multiply and divide.



Group Counting

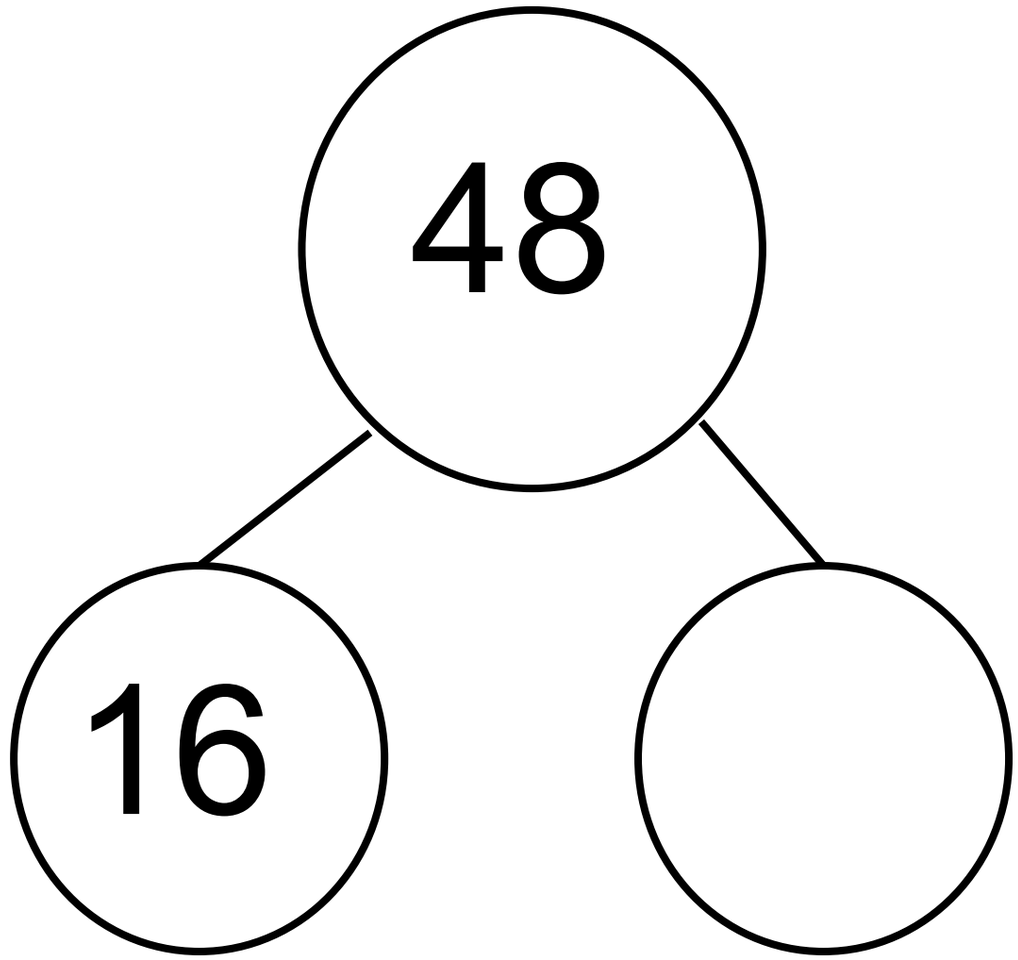
Sixes to 60

Sevens to 70

Eights to 80

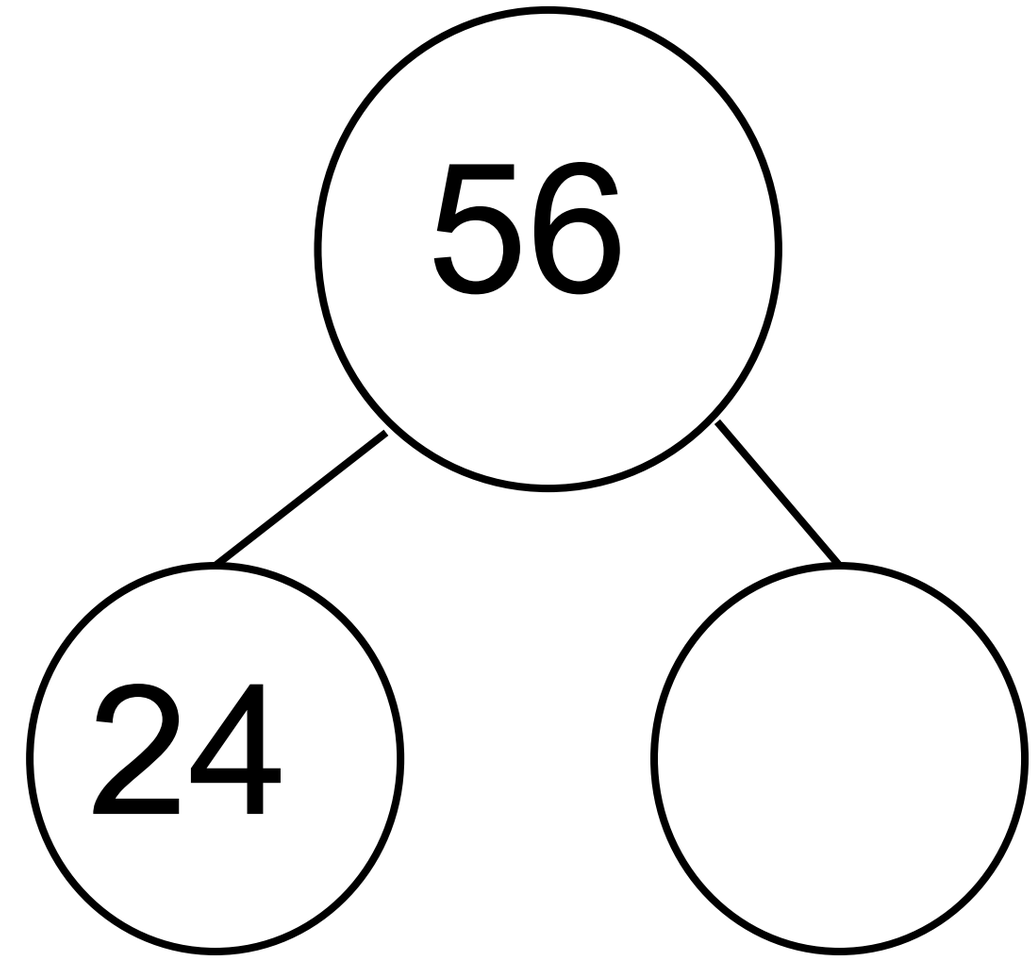
Nines to 90

Decompose Multiples of 8



On your personal white board, fill in the unknown part in the number bond.

Decompose Multiples of 8



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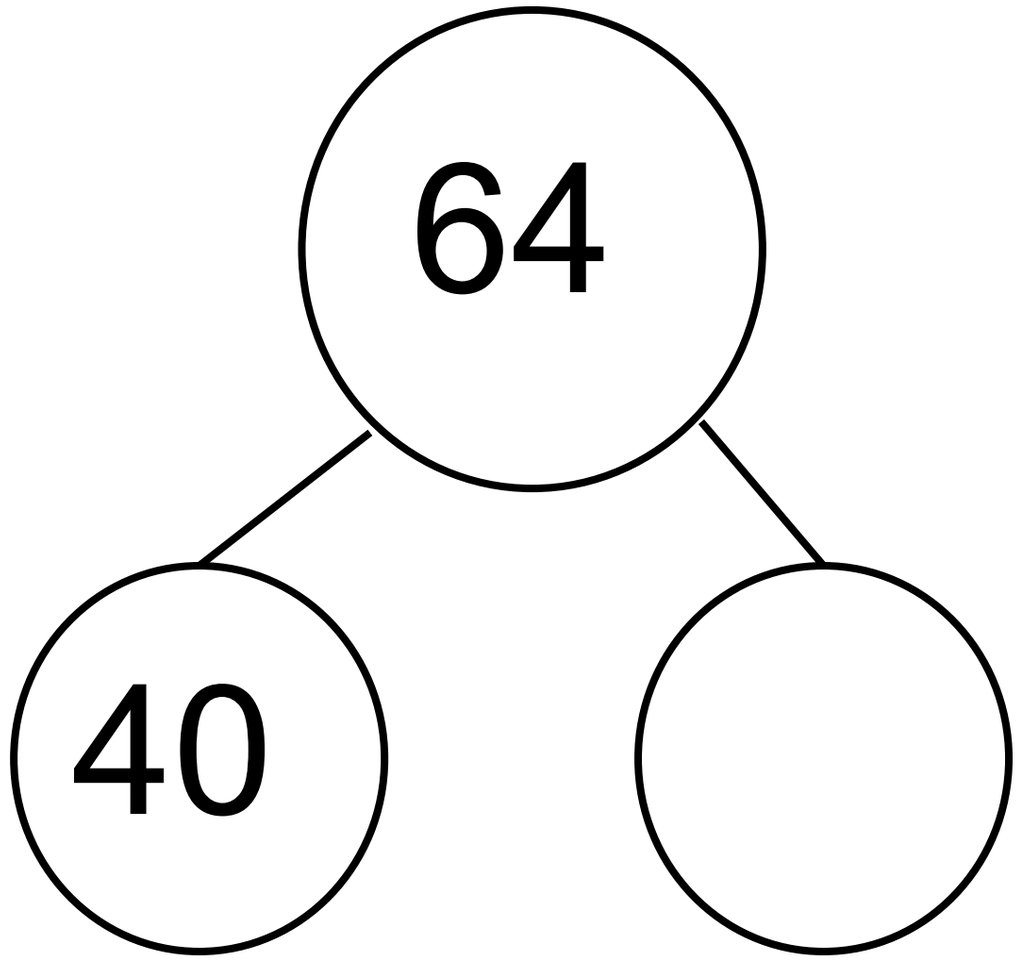

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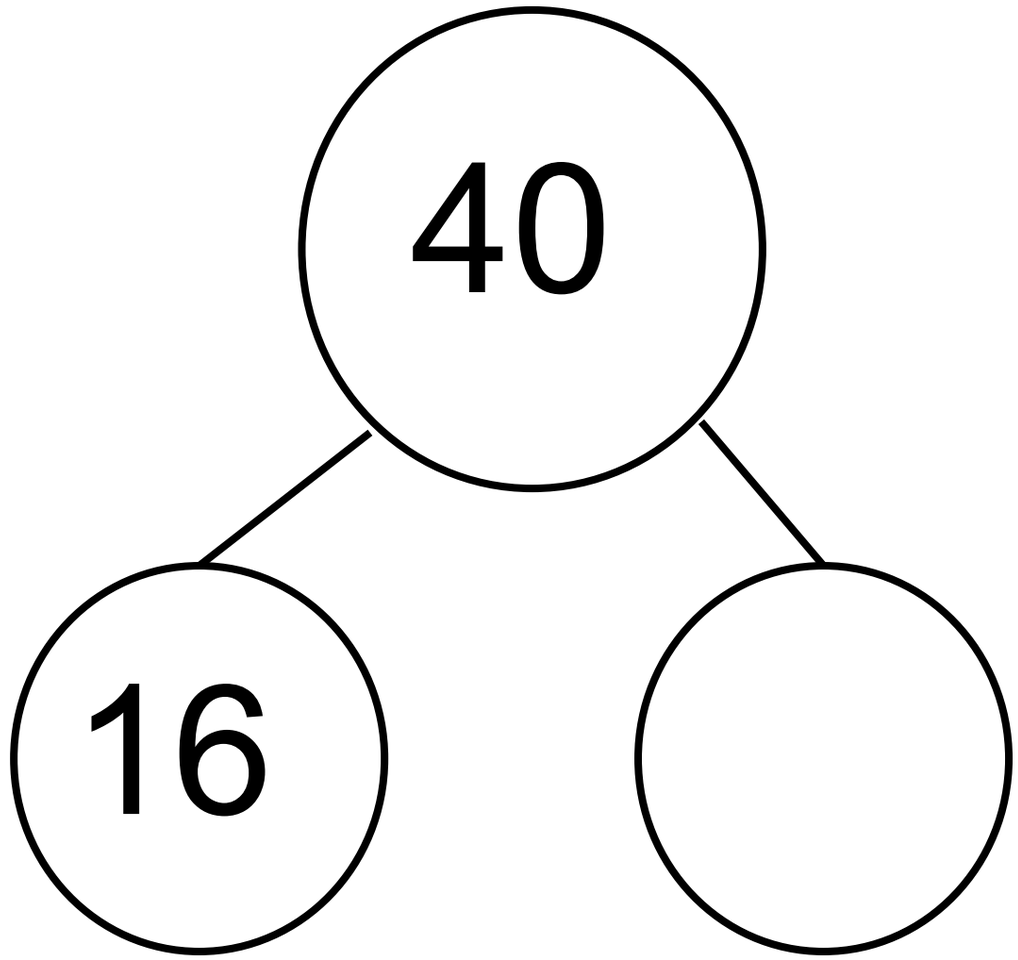

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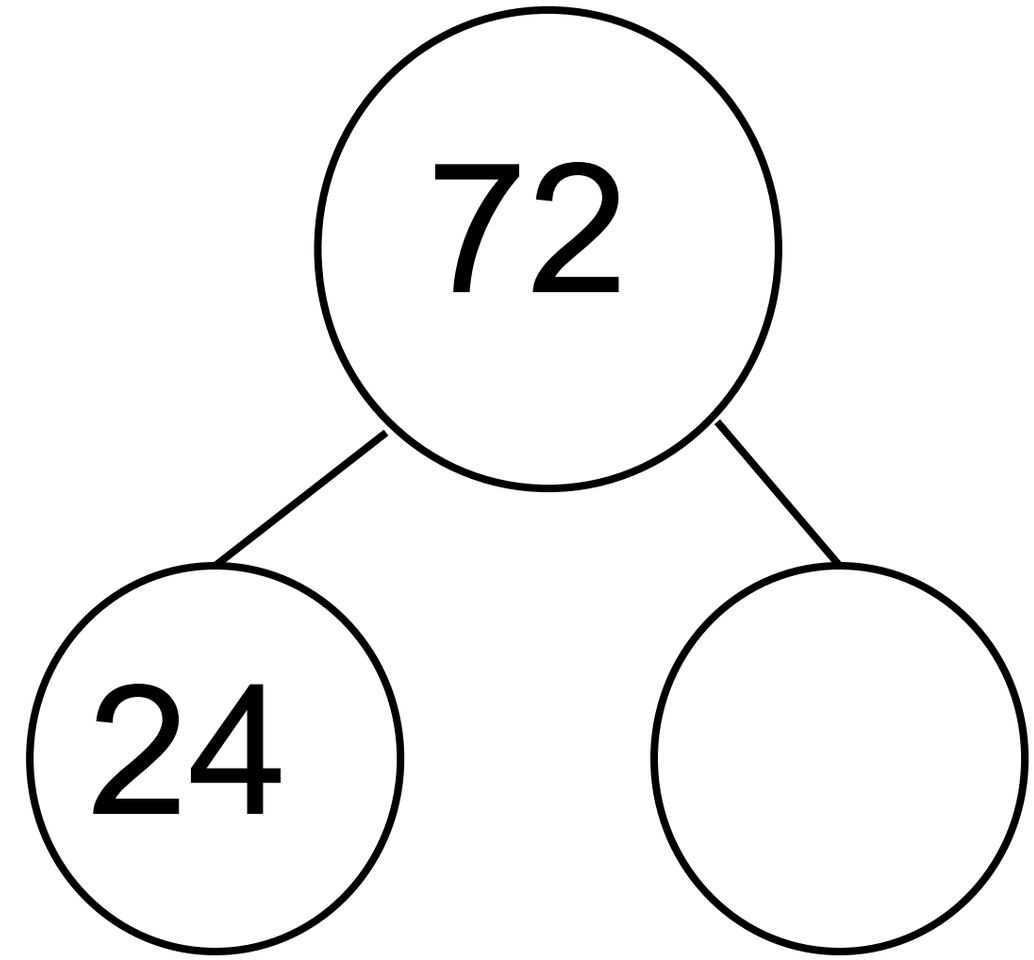
Decompose Multiples of 8



On your personal white board, fill in the unknown part in the number bond.

Application Problem

Use the 5 plus something break apart and distribute strategy to solve 6 × 8. Model with a tape diagram.

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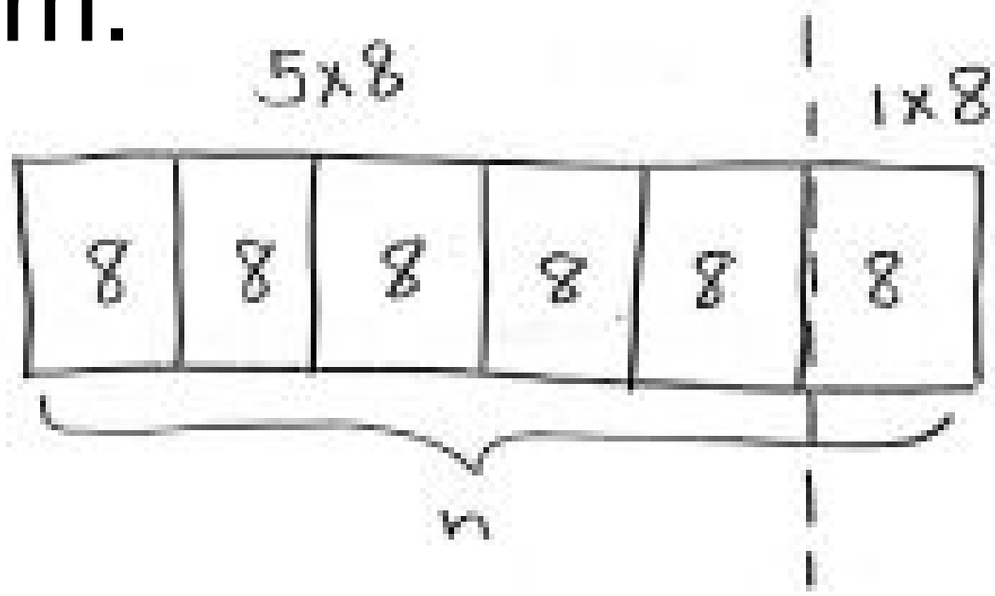


$(5 \times 8) + (1 \times 8)$

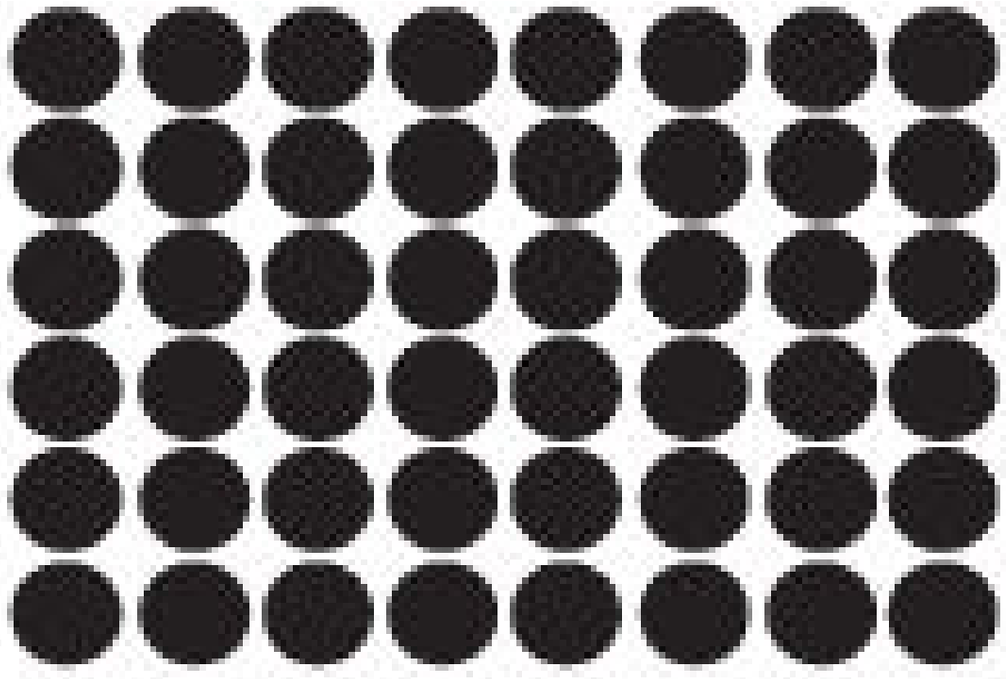
$40 + 8 = 48$, $n = 48$

$6 \times 8 = 48$

Concept Development

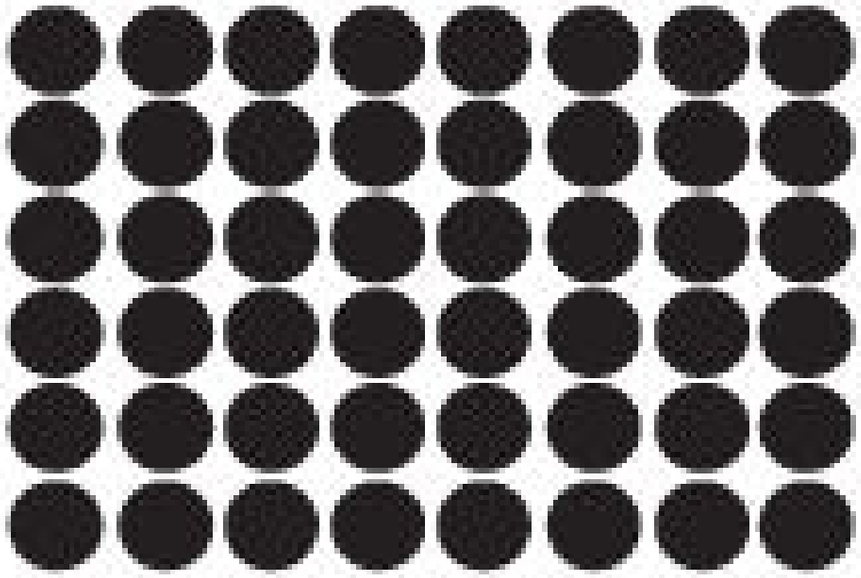
Problem 1: Multiply

Let’s try using the break apart and distribute strategy that way to solve 6 × 8.



$6 \times (5 + 3)$

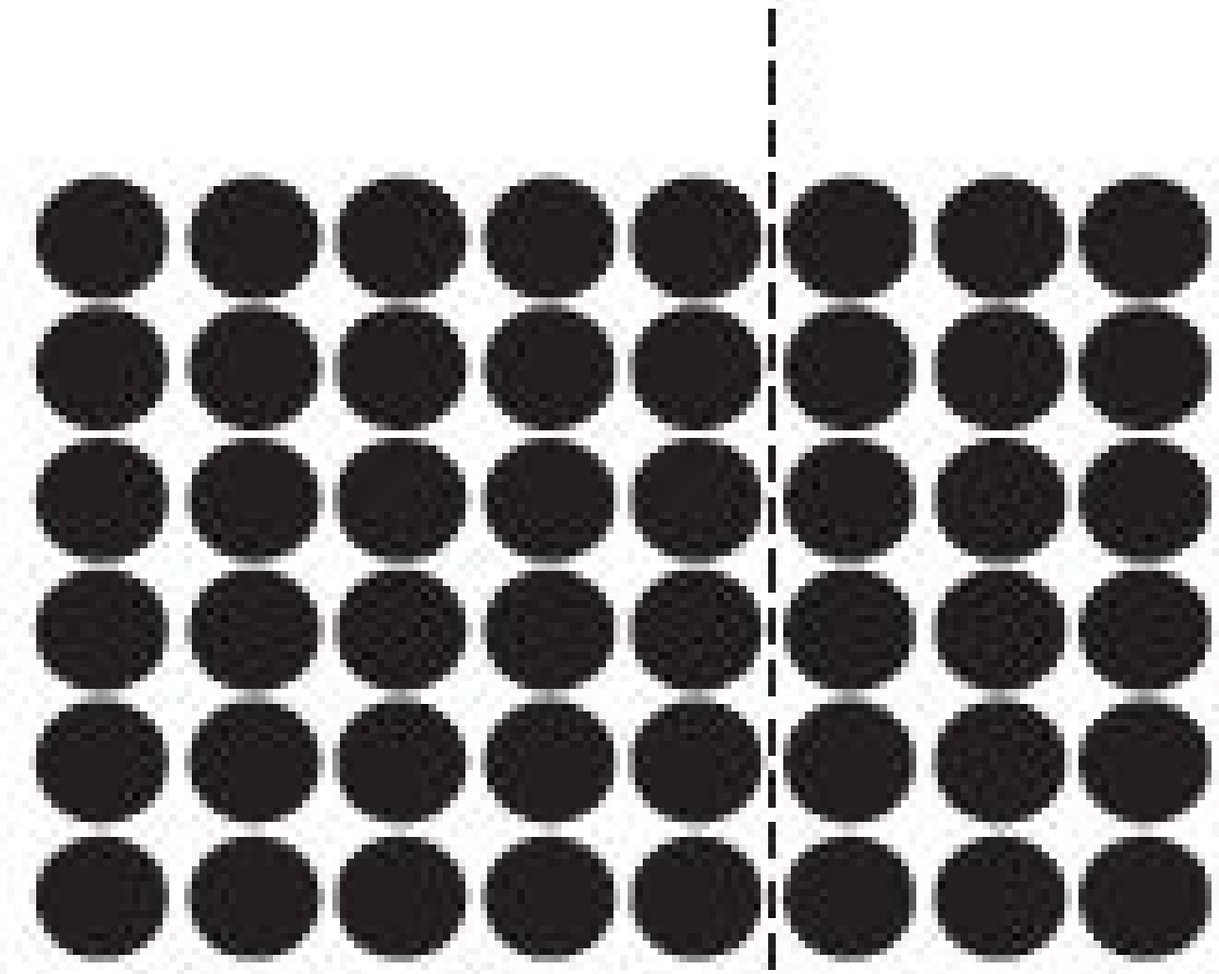
Concept Development



$6 \times (5 + 3)$

Is 8 represented by the number of columns or the number of rows in the array?

Concept Development



$6 \times (5 + 3)$

Concept Development

Problem 2: Divide

Let’s use the break apart and distribute strategy to solve 64 ÷ 8.

Draw a number bond with 64 ÷ 8 as the whole.
Leave the parts empty.

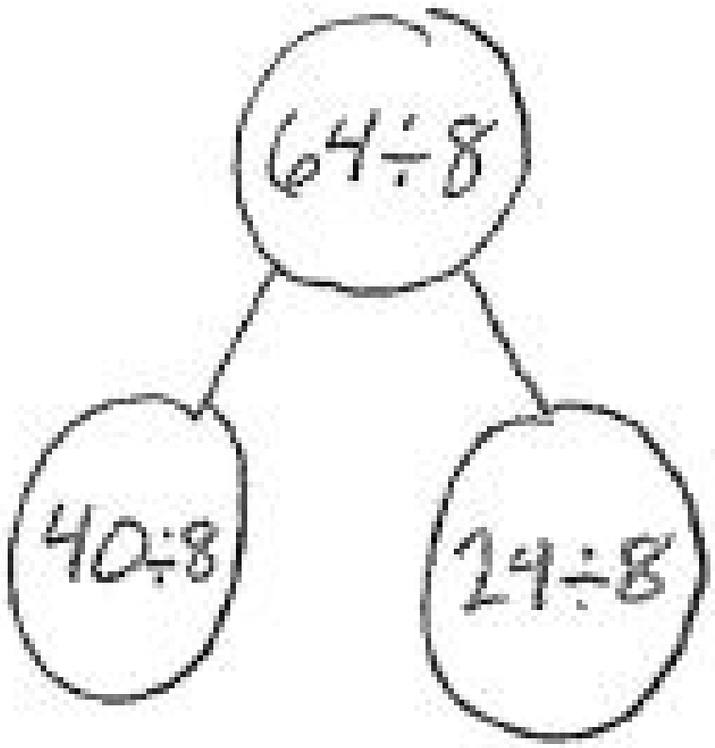
Concept Development

Let’s think about how to break apart 64 into two numbers that are easier for us to divide.

Make a list with your partner.

Remember that when we break apart 64, both numbers need to be divisible by 8.

Concept Development



$64 \div 8 = (40 \div 8) + (24 \div 8)$

$64 \div 8 = 5 + 3$

$64 \div 8 = 8$

Concept Development

Problem 2: Divide

Let’s use the break apart and distribute strategy to solve 96 ÷ 8 =.

Draw a number bond with 96 ÷ 8 as the whole.

Concept Development

Problem 2: Divide

Let’s use the break apart and distribute strategy to solve 54 ÷ 6 =.

Draw a number bond with 54 ÷ 6 as the whole.

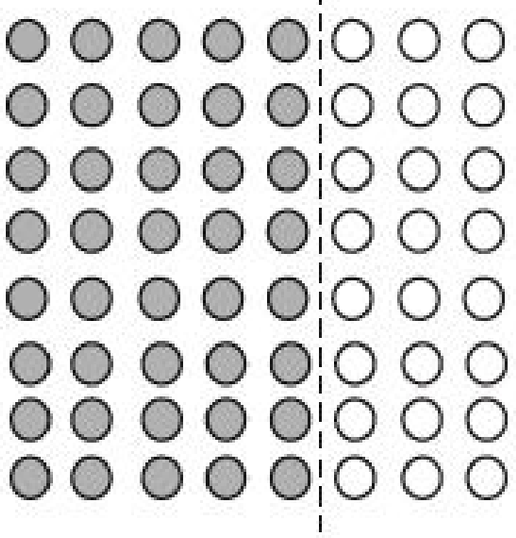
Problem Set

Name _____ Date _____

1. Label the arrays. Then, fill in the blanks below to make the statements true.

a. **8 × 8** = _____

(8 × 5) = _____ (8 × _____) = _____



8 × 8 = 8 × (5 + _____)

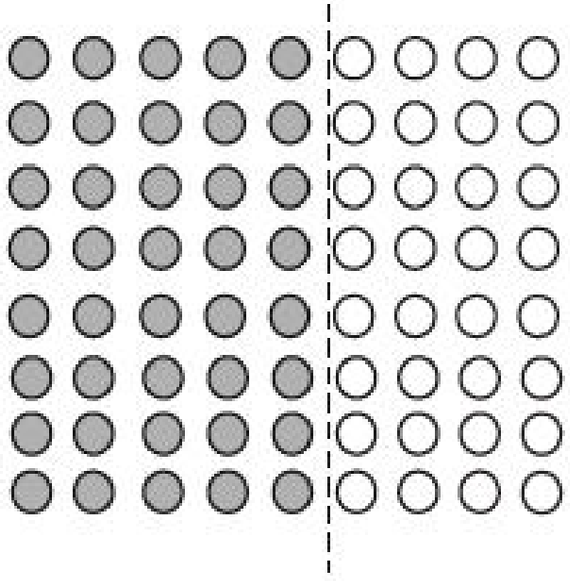
= (8 × 5) + (8 × _____)

= 40 + _____

= _____

b. **8 × 9 = 9 × 8** = _____

(8 × 5) = _____ (8 × _____) = _____



9 × 8 = 8 × (5 + _____)

= (8 × 5) + (8 × _____)

= 40 + _____

= _____

Student Debrief

Lesson Objective: Use the distributive property as a strategy to multiply and divide.

Describe the steps you took to solve for the unknown numbers in Problem 1(a).

How did you know what division fact to write for the unknown part in Problem 3?

What multiplication sentence is used to solve Problem 4? How do you know?

In what ways does the break apart and distribute strategy remind you of the simplifying strategy we learned yesterday?

How did our math work today help make multiplication and division with larger numbers simpler?

Exit Ticket

Name _____ Date _____

Use the break apart and distribute strategy to solve the following problem. You may choose whether or not to draw an array.

$7 \times 8 =$_____