Materials List

(S) Personal white board

Eureka Math

3rd Grade
Module 3
Lesson 2

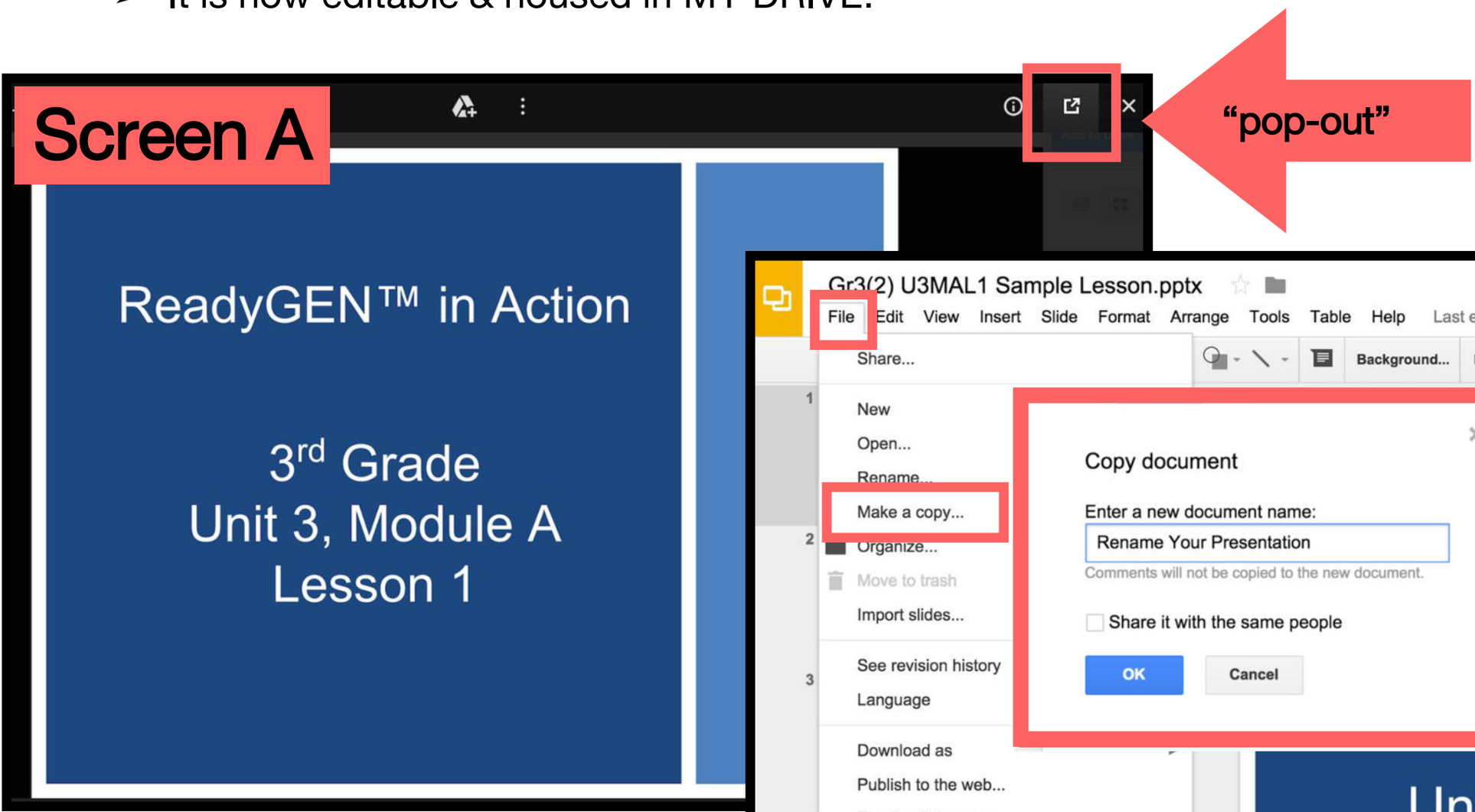
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

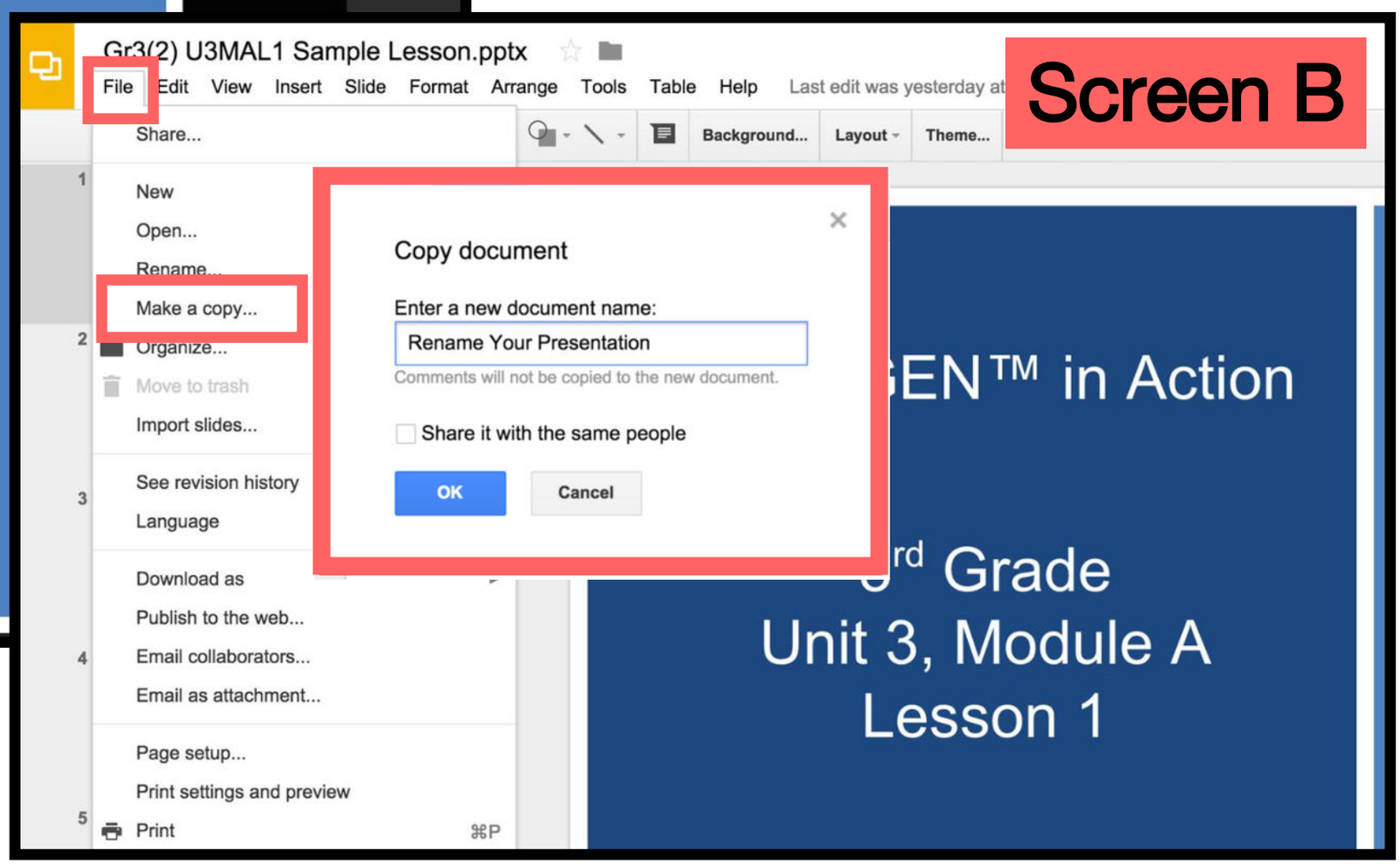
Directions for customizing presentations are available on the next slide.

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.



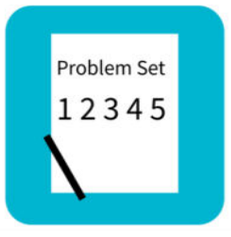


Icons

Read, Draw, Write

Learning Target

Personal White Board

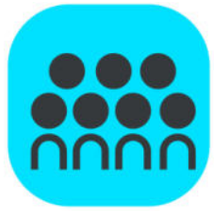


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

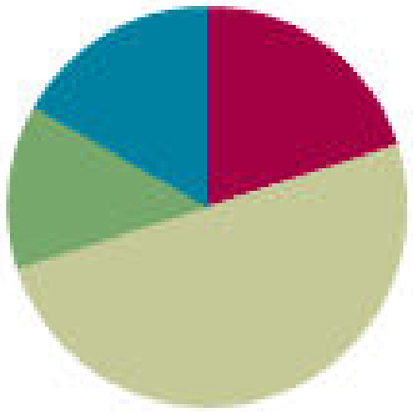
Small Group Time

Lesson 3

Objective: Multiply and divide with familiar facts using a letter to represent the unknown.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(8 minutes)
Concept Development	(30 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can multiply and divide with familiar facts using a letter to represent the unknown.

Familiar Facts

Write 5 × 3 = ___

Say the multiplication sentence.

Familiar Facts

Write 4 × 3 = ___

Say the multiplication sentence.

Familiar Facts

Write 7 × 2 = ___

Say the multiplication sentence.

Familiar Facts

Write ___ × 2 = 10

Say the unknown factor

Familiar Facts

Write ___ × 3 = 6

Say the unknown factor

Familiar Facts

Write ___ × 2 = 16

Say the unknown factor

Familiar Facts

Write 20 = ___ × 10.

Say the unknown factor

Familiar Facts

Write 18 = ___ × 3.

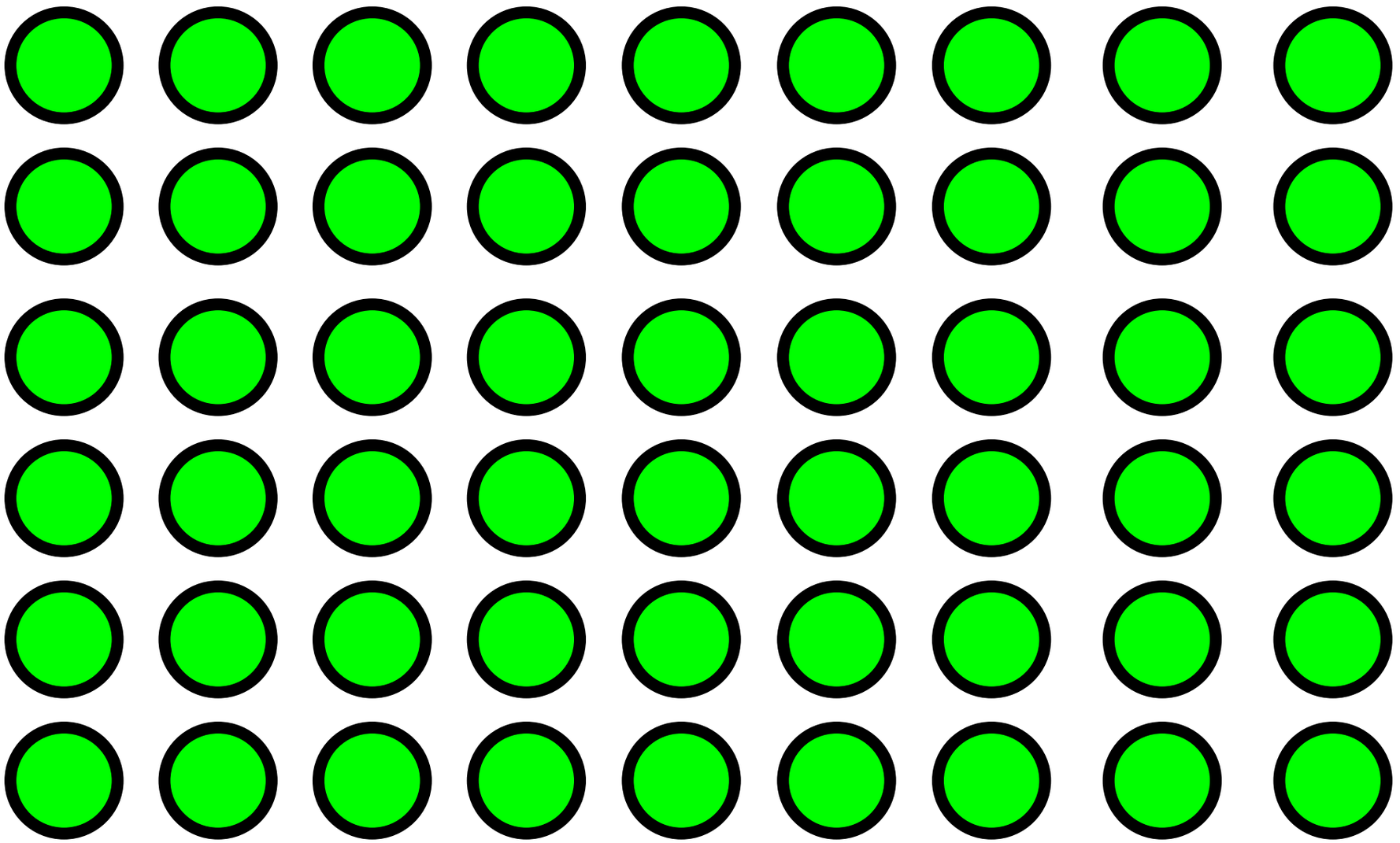
Say the unknown factor

Familiar Facts

Write 45 = ___ × 5.

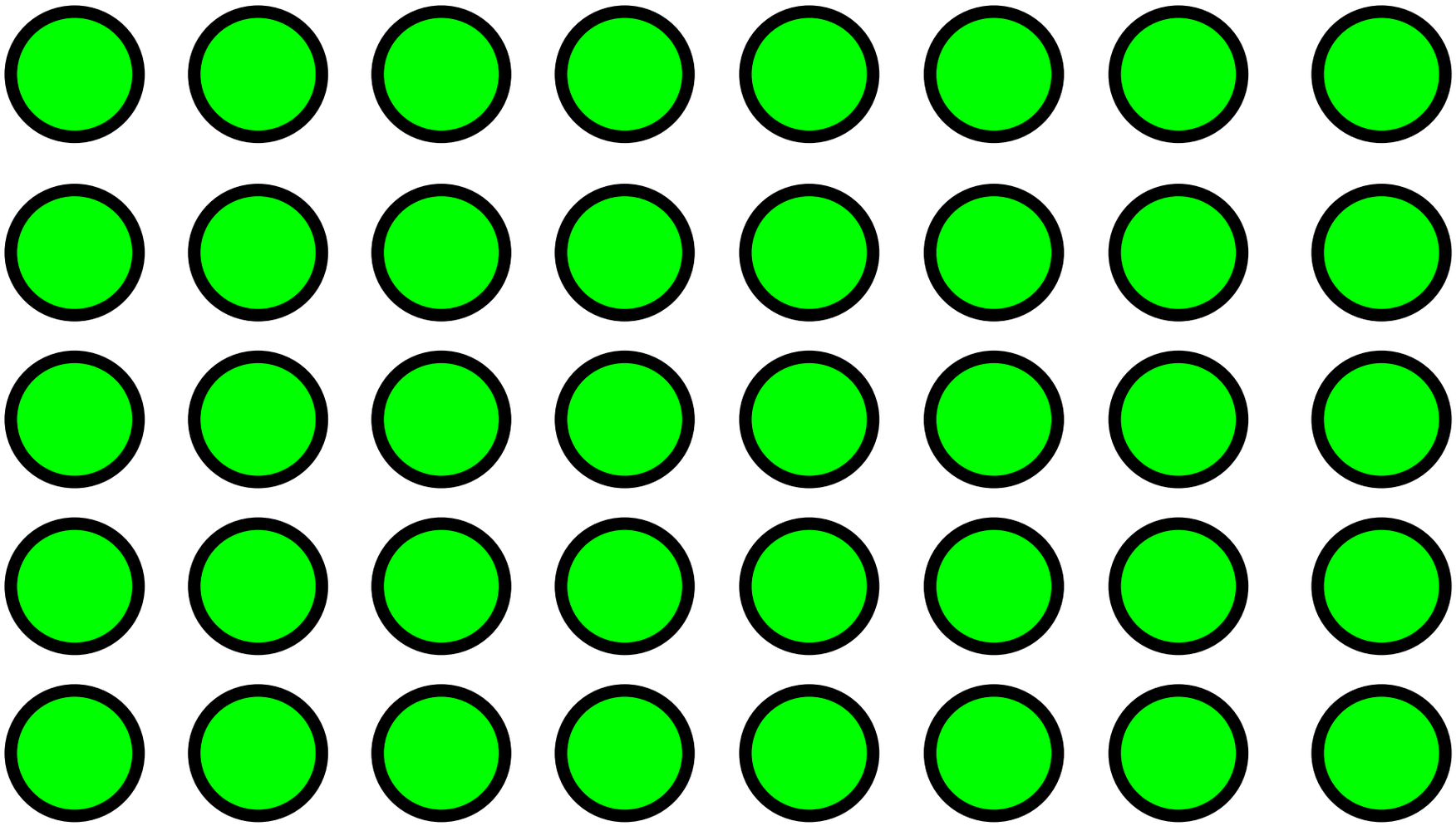
Say the unknown factor

Multiply Using the Distributive Property



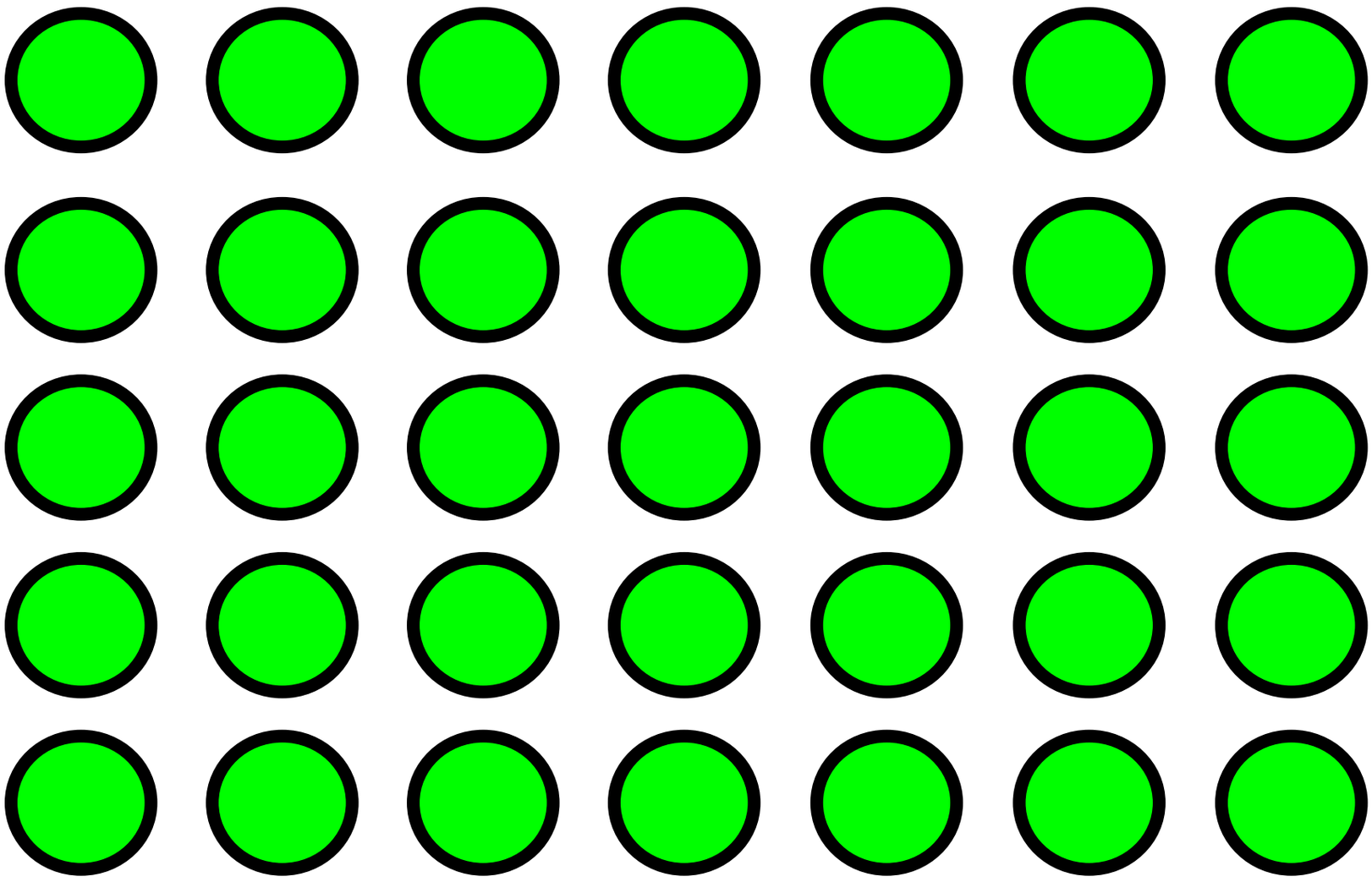
How many groups of 9 are there?

Multiply Using the Distributive Property



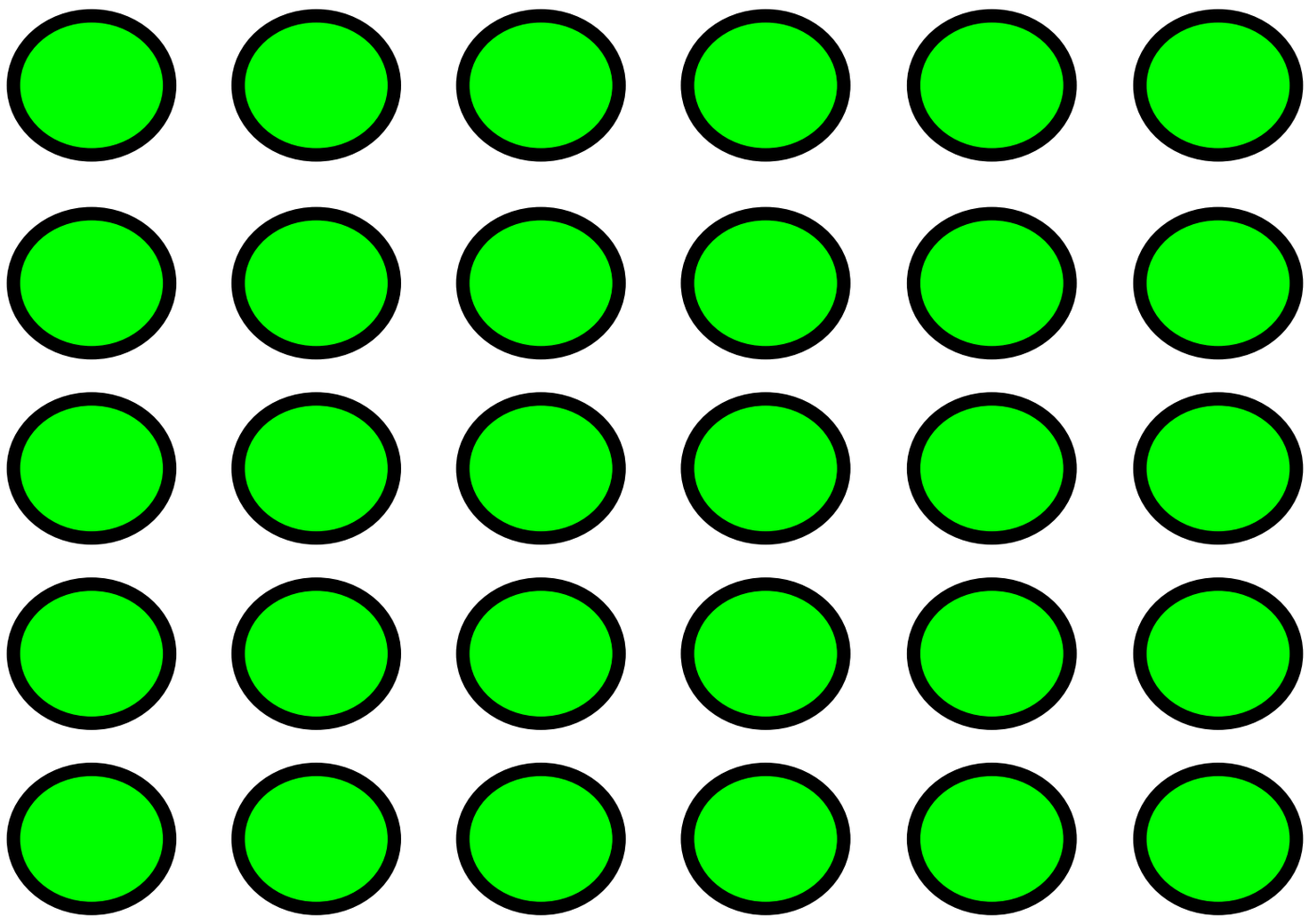
How many groups of 8 are there?

Multiply Using the Distributive Property



How many groups of 7 are there?

Multiply Using the Distributive Property



How many groups of 6 are there?

Make Ten

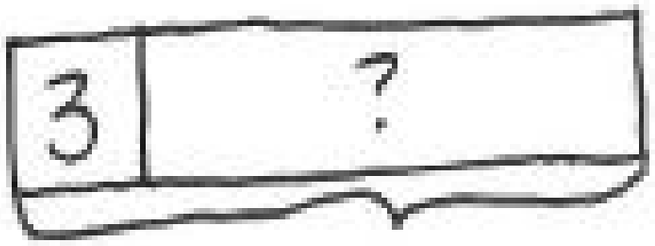
I’ll say a number between 0 and 10.

You say the number that you add to it to make ten.

Application Problem

Twenty-four people line up to use the canoes at the park. Three people are assigned to each canoe. How many canoes are used?

Application Problem



24 people
? canoes

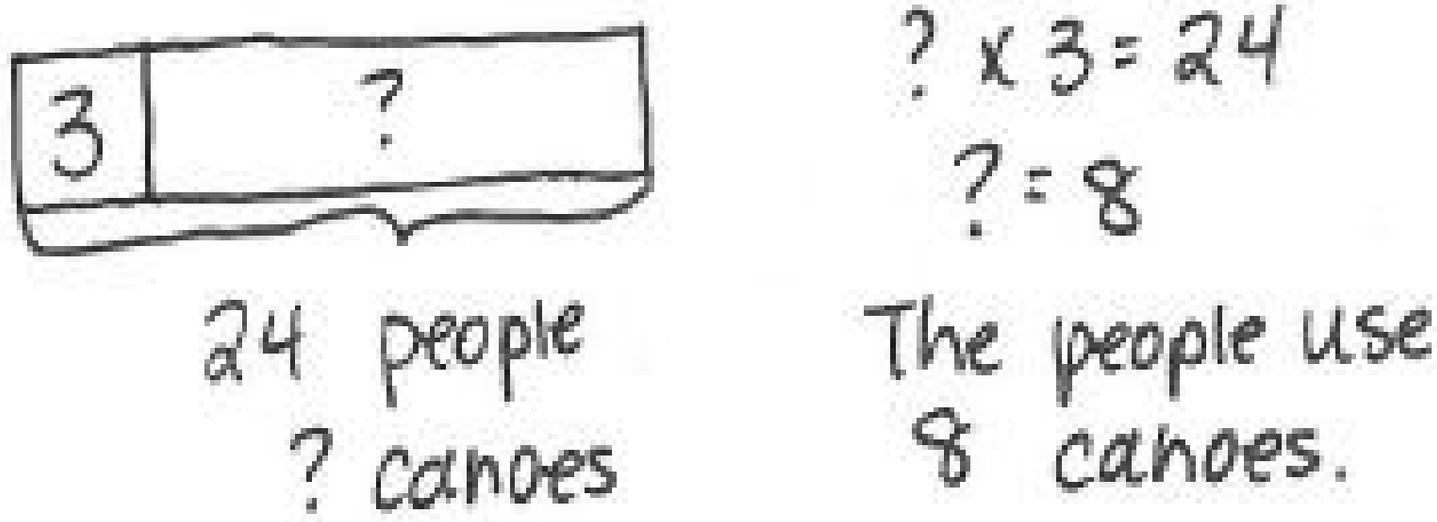
? x 3 = 24
? = 8

The people use
8 canoes.

Concept Development

Problem 1:

Use a letter to represent the unknown in multiplication.



What do the question marks in her work represent?

Concept Development

Problem 2: Use a letter to represent the unknown in division.

Twenty-one students are grouped in threes to go on a field trip. How many groups of students are there?

Read the problem with your partner.

Then, whisper what the unknown represents.

Concept Development

Problem 2:
Use a letter to represent the unknown in division.

$24 = 4 \times r$

Concept Development

Problem 2:

Use a letter to represent the unknown in division.

$$5 = 50 \div m$$

Concept Development

Problem 2:

Use a letter to represent the unknown in division.

$27 \div b = 3$

Concept Development

Problem 2:

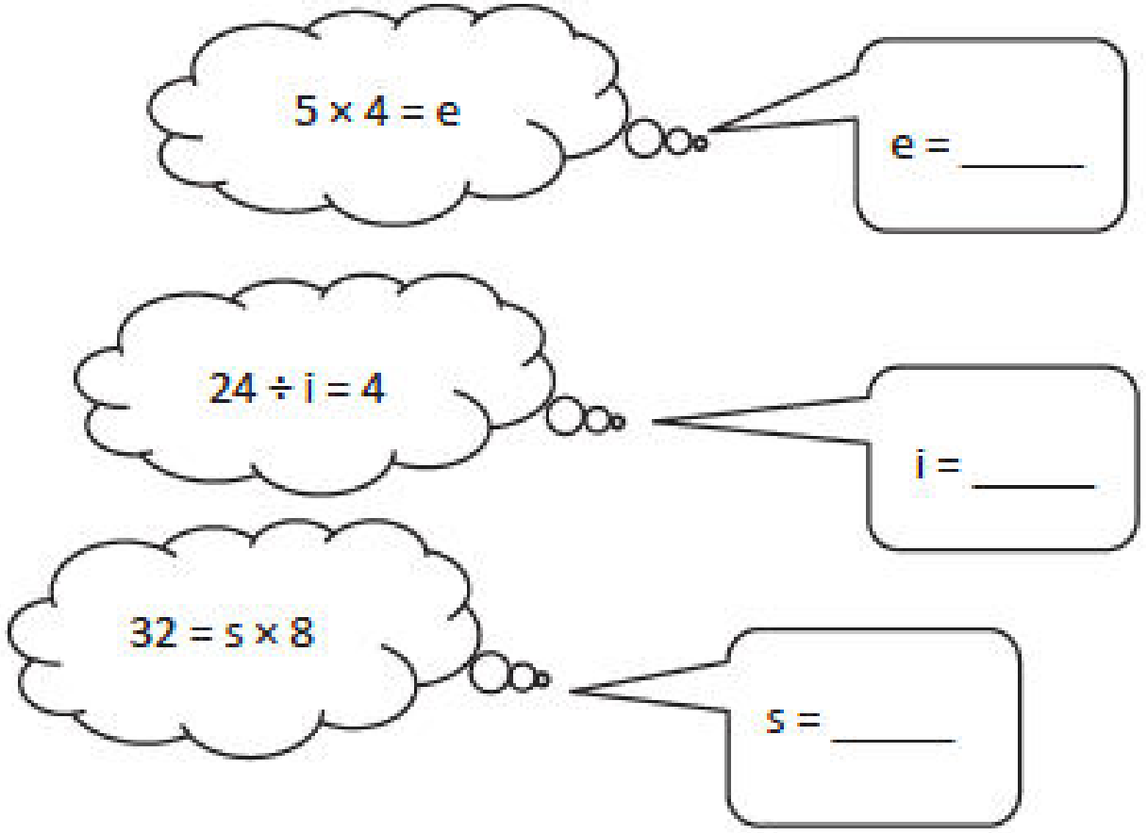
Use a letter to represent the unknown in division.

$$d \div 6 = 3$$

Problem Set

Name _____ Date _____

1. Each equation contains a letter representing the unknown. Find the value of the unknowns, and then write the letters that match the answers to solve the riddle.



Student Debrief

Lesson Objective: Multiply and divide with familiar facts using a letter to represent the unknown.

Explain to your partner how you solved Problem 3.

Tell your partner the steps you took to model and solve Problem 4.

Why is using a letter to represent the unknown more helpful than using a question mark?

Exit Ticket

Name _____ Date _____

Find the value of the unknown in Problems 1–4.

1. $z = 5 \times 9$

   $z =$ _____

2. $30 \div 6 = v$

   $v =$ _____

3. $8 \times w = 24$

   $w =$ _____

4. $y \div 4 = 7$

   $y =$ _____