Materials List

(S) Multiply By 7 (6–10) (Pattern Sheet)

(S) Personal white board

Eureka Math

3rd Grade
Module 3
Lesson 8

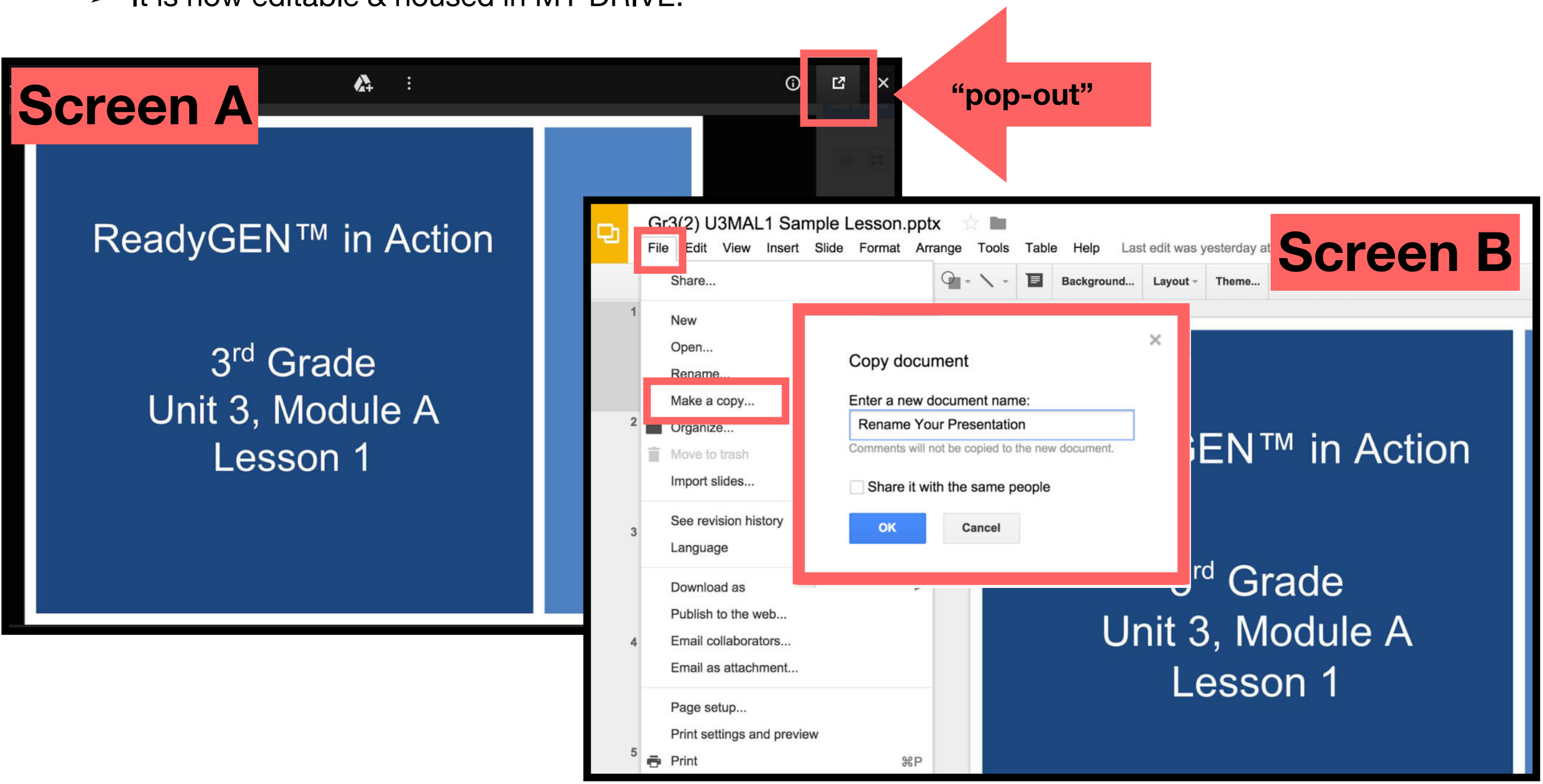
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

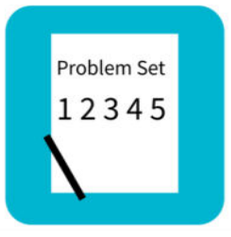


Icons

Read, Draw, Write

Learning Target

Personal White Board

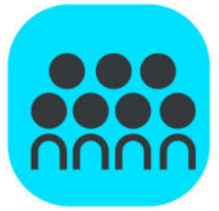


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

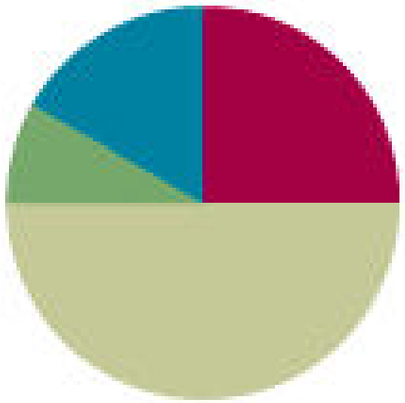
Small Group Time

Lesson 8

Objective: Understand the function of parentheses and apply to solving problems.

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 understand the function of parentheses and apply to solving problems.

Multiply By 7

Write 6 × 7 = ____

Let’s skip-count up by sevens to solve.

I’ll raise a finger for each seven

Multiply By 7

Write 8 × 7 = ____

Let’s skip-count up by sevens to solve.

I’ll raise a finger for each seven

Multiply By 7

Write 7 × 7 = ____

Let’s skip-count up by sevens to solve.

I’ll raise a finger for each seven

Multiply By 7

Write 9 × 7 = ____

Let’s skip-count up by sevens to solve.

I’ll raise a finger for each seven

Multiply By 7 Pattern Sheet

Let's practice multiplying by 7. Be sure to work left to right across the page.

Multiply.

7 x 1 = _____	7 x 2 = _____	7 x 3 = _____	7 x 4 = _____
7 x 5 = _____	7 x 6 = _____	7 x 7 = _____	7 x 8 = _____
7 x 9 = _____	7 x 10 = _____	7 x 5 = _____	7 x 6 = _____
7 x 5 = _____	7 x 7 = _____	7 x 5 = _____	7 x 8 = _____
7 x 5 = _____	7 x 9 = _____	7 x 5 = _____	7 x 10 = _____
7 x 6 = _____	7 x 5 = _____	7 x 6 = _____	7 x 7 = _____

Group Counting

Sixes to 60

Eights to 80

Nines to 90

Add 6 and 7 Mentally

6 + 6 = ___

Say the expression

Add 6 and 7 Mentally

6 + 6 = ___

Add 6 and 7 Mentally

12 + 6 =

18 + 6 =

24 + 6 =

30 + 6 =

Add 6 and 7 Mentally

7 + 7 =

14 + 7 =

21 + 7 =

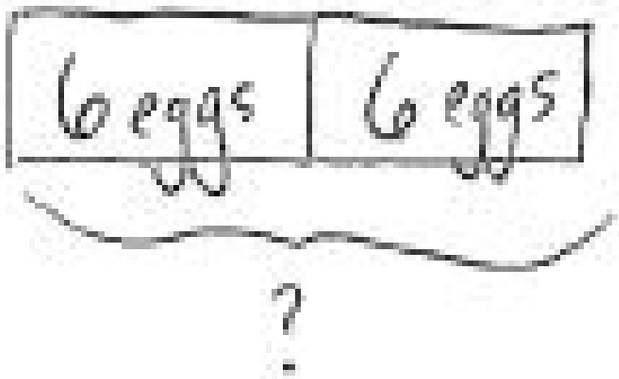
28 + 7 =

35 + 7 =

Application Problem

Richard has 2 cartons with 6 eggs in each. As he opens the cartons, he drops 2 eggs. How many unbroken eggs does Richard have left?

Application Problem



$2 \times 6 \text{ eggs} = 12 \text{ eggs}$

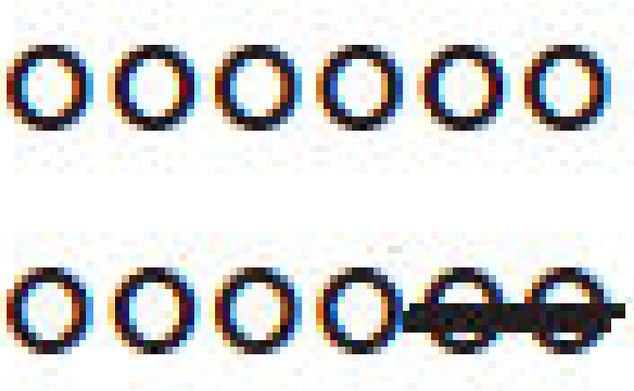
$12 \text{ eggs} - 2 \text{ eggs} = 10 \text{ eggs}$

Richard has 10 unbroken eggs left.

Concept Development

Part 1: Solve equations containing parentheses

The two equations used to solve the Application Problem are $2 \times 6 = 12$ and $12 - 2 = 10$.



This picture shows both.

Talk to your partner: How could we include all of this information in one equation?

Concept Development

Part 1: Solve equations containing parentheses

$2 \times 6 = 12$

$12 - 2 = 10.$

Watch how I use parentheses to show that.

$(2 \times 6) - 2 = 10$

Concept Development

Part 1: Solve equations containing parentheses

$4 + 2 = 6$

$6 \times 6 = 36.$

Watch how I use parentheses to show that.

$(4 + 2) \times 6 = 36$

Concept Development

Part 1: Solve equations containing parentheses

$12 \div 3 = 4$

$15 - 4 = 11$

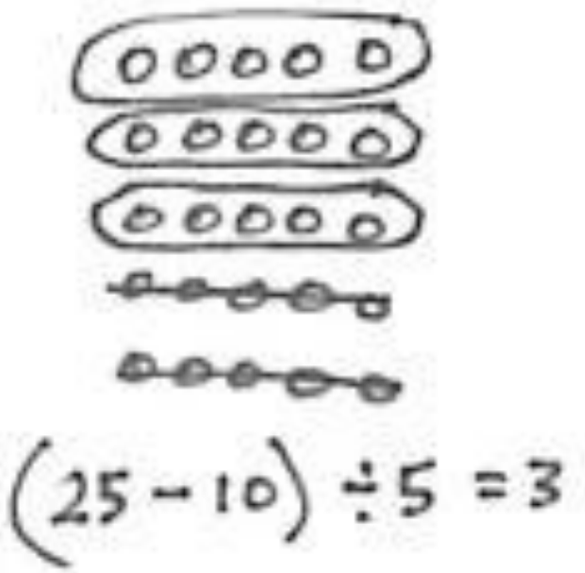
Watch how I use parentheses to show that.

$15 - (12 \div 3) = 11$

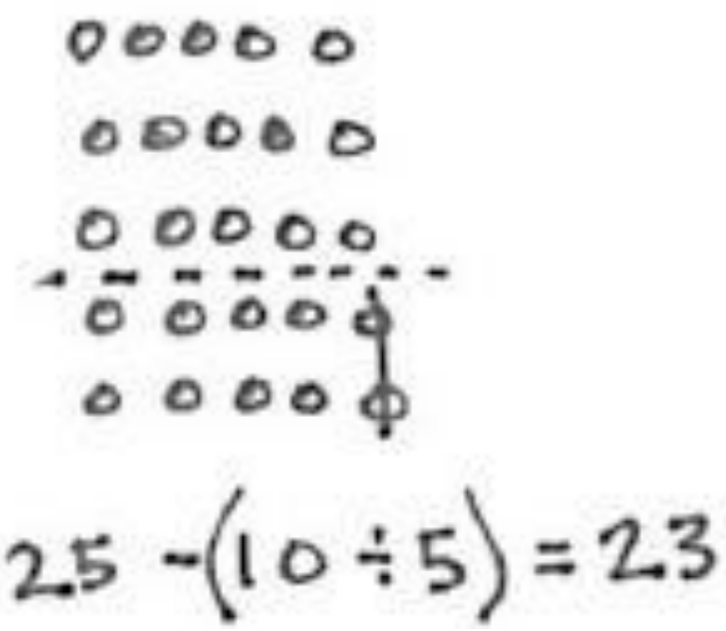
Concept Development

Part 2: Explore how moving the parentheses can change the answer in an equation.

$$(25 - 10) \div 5 = 3$$



Check my work. Is it correct?



Concept Development

Part 2: Explore how moving the parentheses can change the answer in an equation.

$$(2 + 3) \times 7$$

$$2 + (3 \times 7)$$

Concept Development

Part 2: Explore how moving the parentheses can change the answer in an equation.

$(3 \times 4) \div 2 =$

$3 \times (4 \div 2) =$

Problem Set

Name _____ Date _____

1. Solve.

a. $(12 - 4) + 6 =$ _____

b. $12 - (4 + 6) =$ _____

c. _____ $= 15 - (7 + 3)$

d. _____ $= (15 - 7) + 3$

e. _____ $= (3 + 2) \times 6$

f. _____ $= 3 + (2 \times 6)$

i. _____ $= (12 \div 2) + 4$

j. _____ $= 12 \div (2 + 4)$

k. $9 + (15 \div 3) =$ _____

l. $(9 + 15) \div 3 =$ _____

m. $60 \div (10 - 4) =$ _____

n. $(60 \div 10) - 4 =$ _____

Student Debrief

Lesson Objective: Understand the function of parentheses and apply to solving problems.

Look at Problem 1(j). Would the answer be the same if I solved (12 ÷ 2) + (12 ÷ 4)? Why not?

Look at Problem 1(l). Would the answer be the same if I solved (9 ÷ 3) + (15 ÷ 3)? Why?

How did you discover where the parentheses belonged in Problem 2?

Why does moving the parentheses in an equation only change the answer sometimes?

Exit Ticket

Name _____ Date _____

1. Use parentheses to make the equations true.

   a. $24 = 32 - 14 + 6$

   b. $12 = 32 - 14 + 6$

   c. $2 + 8 \times 7 = 70$

   d. $2 + 8 \times 7 = 58$

2. Marcos solves $24 \div 6 + 2 =$ _____. He says it equals 6. Iris says it equals 3. Show how the position of parentheses in the equation can make both answers true.