Materials List

(S) Multiply By 9 (6–10) (Pattern Sheet)

(S) Personal white board

Eureka Math

3rd Grade
Module 3
Lesson 15

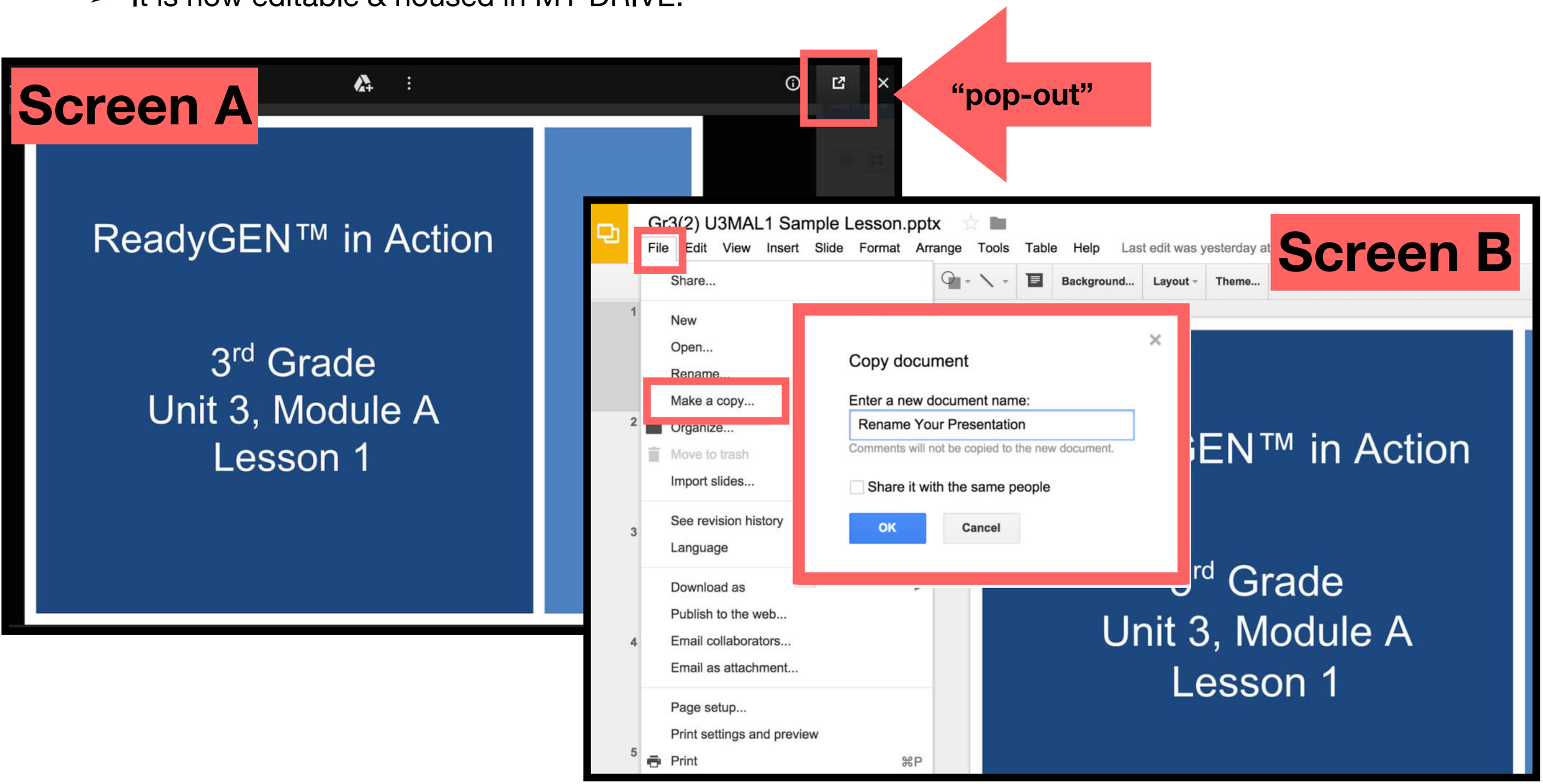
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

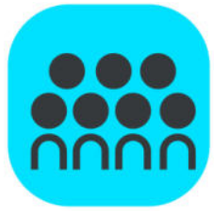
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

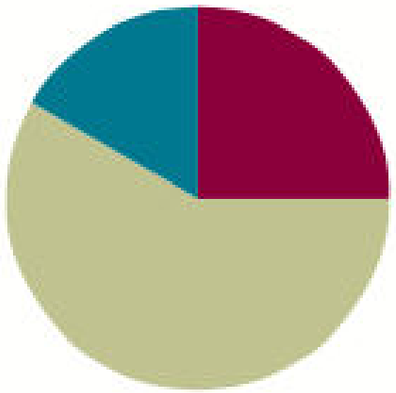
Small Group Time

Lesson 15

Objective: Interpret the unknown in multiplication and division to model and solve problems.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Concept Development	(35 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**

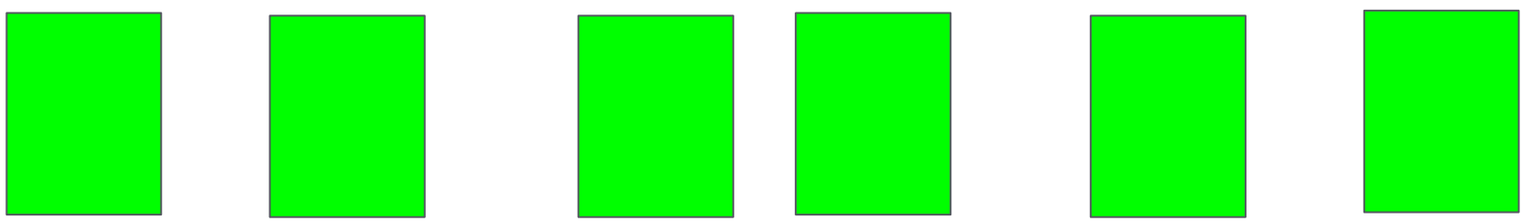


I can interpret the unknown in multiplication and division to model and solve problems.

Multiply By 9

Write 6 × 9 = ____

Let’s skip-count up by nine to solve.



Multiply By 9

Let’s practice multiplying by 9. Be sure to work left to right across the page.

Multiply.

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

Group Counting

Sixes to 60

Sevens to 70

Eights to 80

Divide by 9

Write a × 9 = 18

On your personal white board, write the value of a.

Divide by 9

Write b × 9 = 45

On your personal white board, write the value of b.

Divide by 9

Write c × 9 = 36

On your personal white board, write the value of c.

Divide by 9

Write d × 9 = 54

On your personal white board, write the value of d.

Divide by 9

Write e × 9 = 27

On your personal white board, write the value of e.

Divide by 9

Write f × 9 = 90

On your personal white board, write the value of f.

Divide by 9

Write g × 9 = 81

On your personal white board, write the value of g.

Divide by 9

Write h × 9 = 72.

On your personal white board, write the value of h.

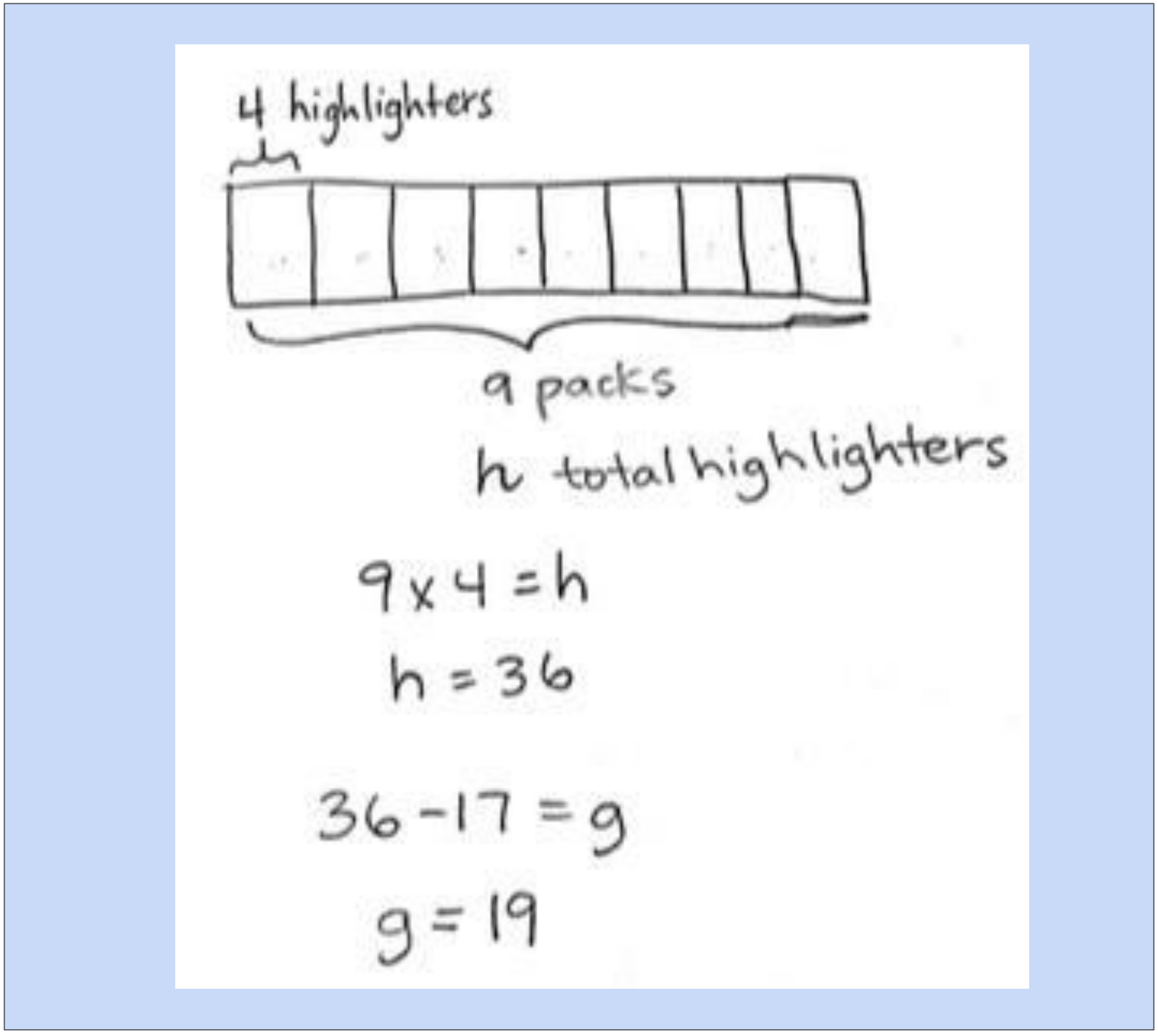
Concept Development

Problem 1: Interpret the unknown in multiplication.

Write or project the following problem: Ada buys 9 packs of highlighters with 4 in each pack. After giving 1 highlighter to each classmate, she has 17 left. How many highlighters does Ada give away?

Model the problem. Then, tell your partner the steps you'll follow to solve it.

Concept Development



Concept Development

Problem 2: Interpret the unknown in division.

Eliza finds a bag of 72 marbles and runs to share them with 8 of her friends. She's so excited that she drops the bag and loses 18 marbles. How many marbles will Eliza and each of her friends get?

What should we do first, subtract or divide? Why?

Concept Development

Eliza finds a bag of 72 marbles and runs to share them with 8 of her friends. She's so excited that she drops the bag and loses 18 marbles. How many marbles will Eliza and each of her friends get?

Problem Set

Name _____ Date _____

Write an equation, and use a letter to represent the unknown for Problems 1–6.

1. Mrs. Parson gave each of her grandchildren $9. She gave a total of $36. How many grandchildren does Mrs. Parson have?

2. Shiva pours 27 liters of water equally into 9 containers. How many liters of water are in each container?

Student Debrief

Lesson Objective: Interpret the unknown in multiplication and division to model and solve problems.

In your model for Problem 1, is the unknown the number of units or the size of each unit?

In Problem 3, how did you show what letter you used to represent the unknown and what it stood for?

How did you solve the large division fact in Problem 4?

What longer equation, including parentheses, can be used to solve Problem 6?

Exit Ticket

Name _____ Date _____

Use a letter to represent the unknown.

1. Mrs. Aquino pours 36 liters of water equally into 9 containers. How much water is in each container?