Eureka Math

2nd Grade
Module 2
Lesson 7

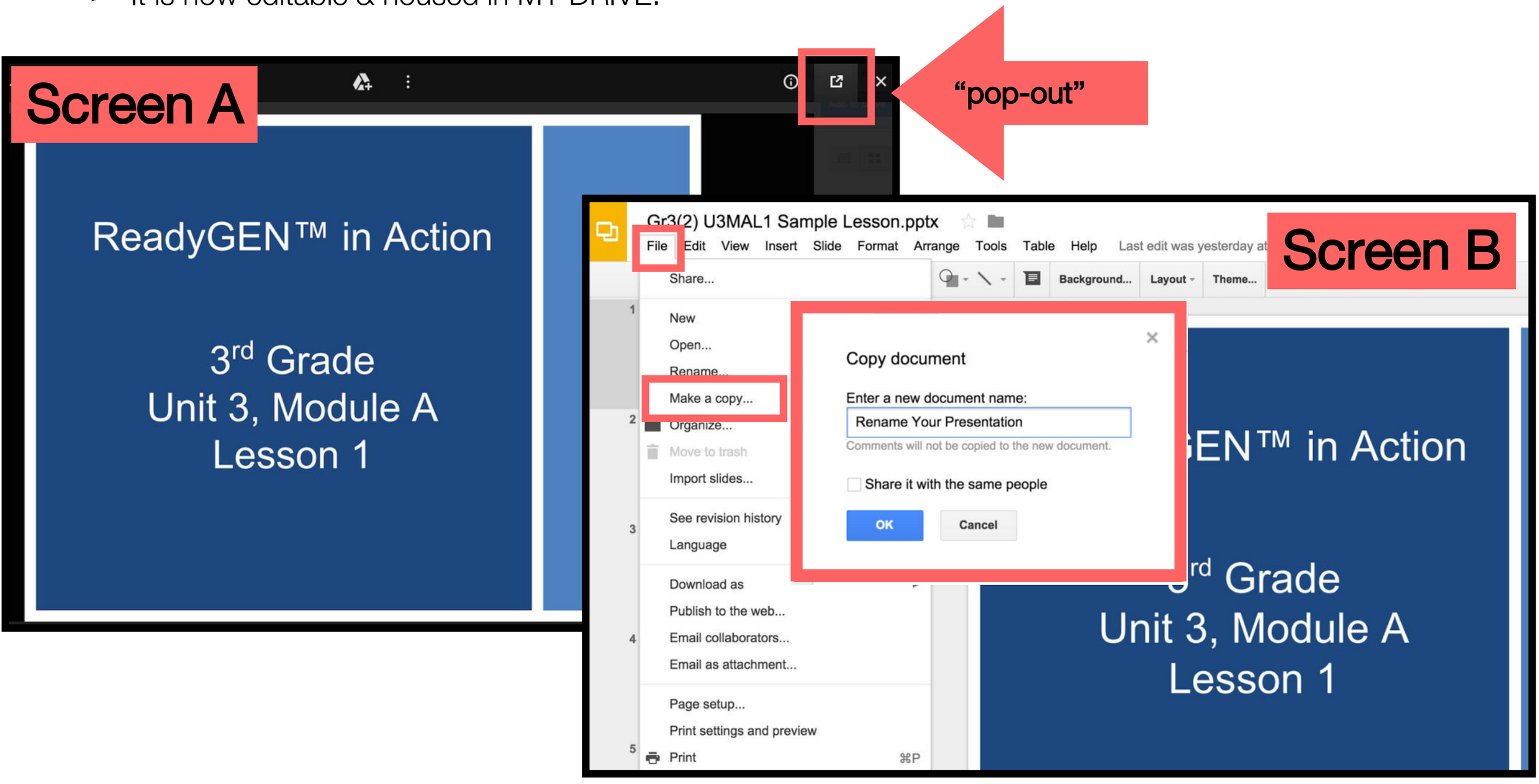
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

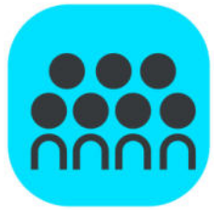
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

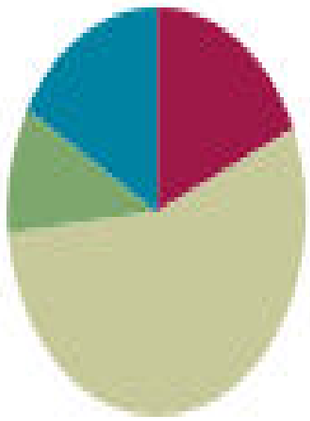
Small Group Time

Lesson 7

Objective: Measure and compare lengths using standard metric length units and non-standard length units; relate measurement to unit size.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(6 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Materials Needed:

Concept Development:

- (S) Whiteboard
- (S) centimeter rulers
- (S) A baggies for pairs with: 1 straw, 1 wedge eraser, 1 sticky note, 1 crayon and 30 paper clips (half the bags small paper clips, the other half large paper clips.)
- (S) meter strip template
- (S) 2 sheets of paper per pair

I can measure and compare lengths using standard metric length units and non-standard length units.

Which Is Shorter?

I am going to say two lengths. Tell me which length is shorter. Ready?

6 centimeters or 10 centimeters?

Give the number sentence to find how much shorter.

10cm-6cm=4cm

12 cm and 22 cm

20 cm and 9 cm

12 cm and 24 cm

23cm and 15 cm

16 cm and 20 cm

9 cm and 19 cm

20 cm and 13 cm

24 cm and 14 cm

18cm and 29 cm

Sprint

A

Number Correct: _____

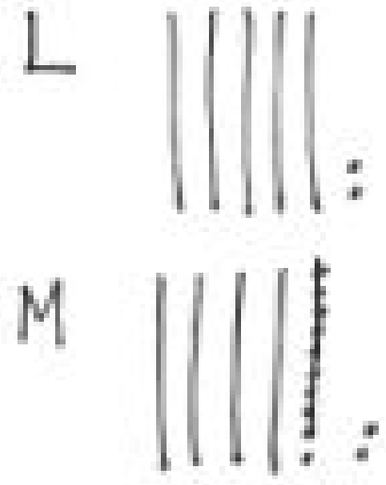
Subtraction

1.	3 - 1 =	
2.	13 - 1 =	
3.	23 - 1 =	
4.	53 - 1 =	
5.	4 - 2 =	
6.	14 - 2 =	
7.	24 - 2 =	
8.	64 - 2 =	
9.	4 - 3 =	

23.	8 - 7 =	
24.	18 - 7 =	
25.	58 - 7 =	
26.	62 - 2 =	
27.	9 - 8 =	
28.	19 - 8 =	
29.	29 - 8 =	
30.	69 - 8 =	
31.	7 - 3 =	

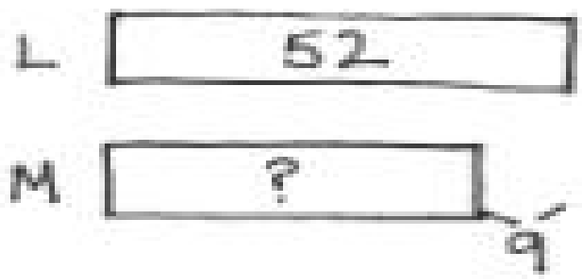
Application Problem

Luigi has 9 more books than Mario. Luigi has 5 books.
How many books does Mario have?



52 - 9 = 43

Mario has 43 books.



52 - 9 = 43

42 10

10 - 9 = 1
42 + 1 = 43

Mario has 43 books.

Concept Development

Measure your straw with your paper clips.

How long is the straw?

Why do you think the measurements are different?
Turn and talk.

Take out your crayon and measure with your paper clips. Share your measurement with your partner.

Concept Development

Switch bags with someone at a different table.

Do you know why your measurements were different?

Why does the size of my paper clip matter?

What does that tell you about measurement and unit size?

Concept Development

Let’s measure again using small and big paper clips mixed together.

What were your results?

Why are all these measurements different?

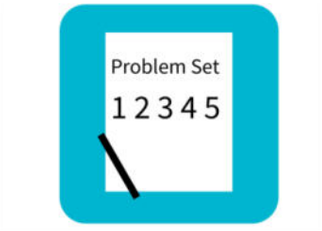
So, if I wanted to order a table and I told you I want it to be 80 paper clips long, what might happen?

Concept Development

What do you notice about the measurement of the object when you use a centimeter ruler?

What is the same about all the rulers?

Why is it more efficient to measure with a centimeter instead of paper clips?



Problem Set

Name _____ Date _____

Measure each set of lines with one small paper clip, using mark and move forward.
Measure each set of lines in centimeters using a ruler.

1. Line *A* _____

   Line B _____

   a. Line *A*

      _____ paper clips _____ cm

   b. Line B

      _____ paper clips _____ cm

   c. Line B is about _____ paper clips shorter than Line *A*.

   d. Line *A* is about _____ cm longer than Line B.

Debrief

- Turn to your partner and compare your answers to Problems 1 and 2. Which math strategies did you use to determine which line was longer or shorter?

- Look at Problem 4. Turn and talk to your partner about why Christina's answer is incorrect.

- Do you think that paper clips are a reliable measurement tool? Is a ruler a better measurement tool? Why?

Debrief

- What did you notice about the relationship between the unit of length (e.g., paper clips, centimeters) and the number of units needed to measure the lines? Use comparative words (bigger, smaller, greater, fewer) in your response.

Exit Ticket

Name _____ Date _____

Measure the lines with small paper clips and then with a centimeter ruler. Then, answer the questions below.

Line 1 _____

Line 2 _____

Line 3 _____

a. Line 1

_____ paper clips _____ cm

b. Line 2

_____ paper clips _____ cm