#### Eureka Math

First Grade Module 3 Lesson 04

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!

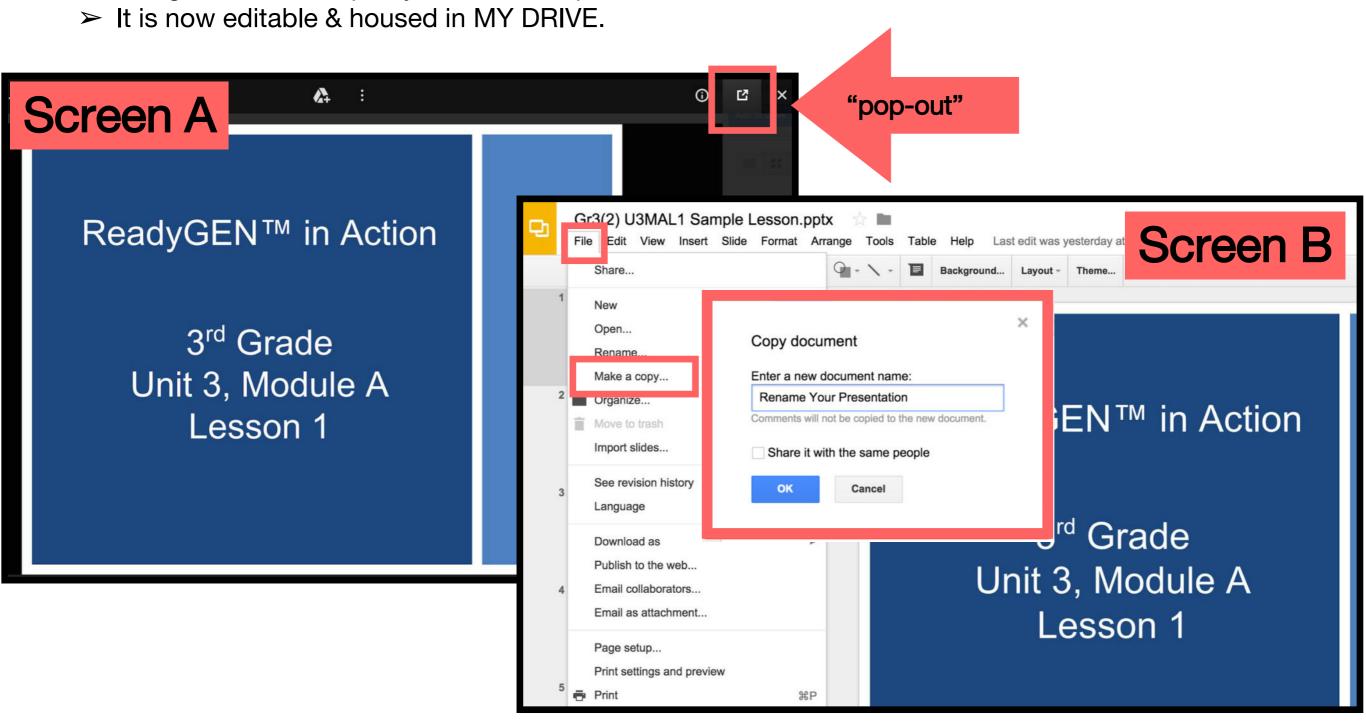
Directions for customizing presentations are available on the next slide.



#### **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.



#### 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 4

Objective: Express the length of an object using centimeter cubes as length units to measure with no gaps or overlaps.

#### Suggested Lesson Structure

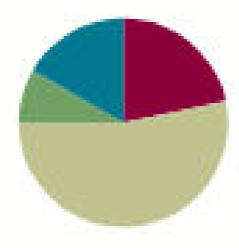
| Fluency Practice | (13 minutes) |
|------------------|--------------|
|------------------|--------------|

Application Problem (5 minutes)

Concept Development (32 minutes)

Student Debrief (10 minutes)

Total Time (60 minutes)



#### Materials Needed

- (S) 1 die per pair
- (T) Timer
- (S) Personal white board
- (T) Hide Zero cards (Lesson 2 Fluency Template 1) enlarged
- (T) Projector
- (T) new crayon (9 cm)
- (T) unsharpened pencil (19 cm)
- (T) small glue stick (8 cm)
- (T) dry erase marker (12 cm)
- (T) centimeter cubes
- (S) Bag with 20 centimeter cubes
- (S) bag with a new crayon, unsharpened pencil, small glue stick, dry erase marker, jumbo craft stick (15 cm), and small paper clip (3 cm)
- (S) measurement recording sheet (Template)



I can express the length of an object using centimeter cubes as length units to measure with no gaps or overlays.



#### Race and Roll Addition

Let's play Race and Roll! Start at 0. With your partner, take turns rolling a die and then saying a number sentence by adding the number rolled to the total.

For example, if you roll a 6 first, your number sentence would be 0 + 6 = 6. Then if your partner rolls a 3, they would say 6 + 3 = 9.

Continue rolling quickly and saying number sentences until you reach 20. Stand when you reach 20!



Let's play Speed Writing by Twos! You will be timed as you write on your boards numbers from 0 to 40 by twos.

Get ready!

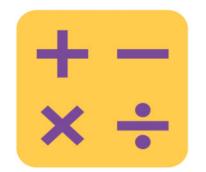


How can I take 14 apart to help me subtract?



How can I take 14 apart to help me subtract?

Yes! 14 can be taken apart into 10 and 4.



I want to subtract 2 from 14. Write a number sentence to show whether I should subtract 2 from the 4 or the 10.

Write a number sentence to show whether I should subtract 2 from the 4 or the 10.

Yes! It would be 4 - 2 = 2.



Why wouldn't I take from my 10?



Why wouldn't I take from my 10?

I heard you say you don't need to because you have enough ones.



It's much easier to just subtract from my ones! Since 4 - 2 = 2, 14 - 2 is what? Write the subtraction sentence.

Since 4 - 2 = 2, 14 - 2 is what? Write the subtraction sentence.

The number sentence would be 14 - 2 = 12.



#### Application Problem

Joe ran a string from his room to his sister's room to measure the distance between them. When he tried to use the same string to measure the distance from his room to his brother's room, the string didn't reach! Which room was closer to Joe's room, his sister's or his brother's?



How can we find out the length of this crayon? Turn and talk to your partner.





How can we find out the length of this crayon?

I heard some of you say we could use string or use a ruler. Good thinking!



Let's find out how long this crayon is using these centimeter cubes. What do you notice about the centimeter cubes?



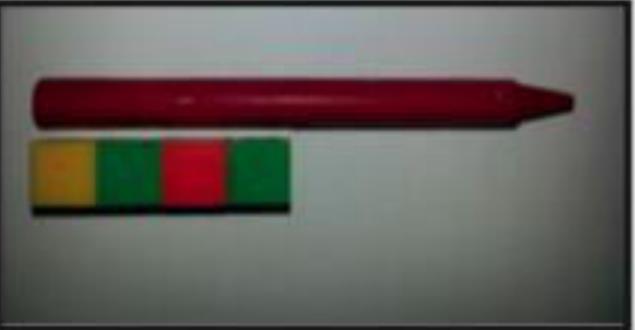




What do you notice about the centimeter cubes?

I heard some say that they are all exactly the same size. They also have the same length.







Since they have the same length, we can figure out how many centimeter cubes long this crayon is. Count with me as I lay down each centimeter cube to match the length of the crayon.



A STORY OF UNITS

Name

We are now going to practice measuring and recording the length of objects in our bag!

| Classroom Objects | Length Using Centimeter Cubes |
|-------------------|-------------------------------|
| glue stick        | centimeter cubes long         |
| dry erase marker  | centimeter cubes long         |
| craft stick       | centimeter cubes long         |
| paper clip        | centimeter cubes long         |
|                   | centimeter cubes long         |
|                   | centimeter cubes long         |
|                   |                               |

Lesson 4 Template

centimeter cubes long

# Problem Set 12345

A STORY OF UNITS

#### Problem Set

Measure the length of each picture with your cubes. Complete the statements below. 1. The pencil is \_\_\_\_\_ centimeter cubes long. 2. The pan is \_\_\_\_\_ centimeter cubes long. 3. The shoe is \_\_\_\_\_ centimeter cubes long. 4. The bottle is \_\_\_\_\_ centimeter cubes long. The paintbrush is \_\_\_\_\_ centimeter cubes long. 6. The bag is \_\_\_\_\_ centimeter cubes long.

7. The ant is \_\_\_\_\_ centimeter cubes long.

8. The cupcake is \_\_\_\_\_ centimeter cubes long.

Lesson 4 Problem Set 1:3

| A STORT OF UNITS                        | Lesson 4 Problem Set                      |
|-----------------------------------------|-------------------------------------------|
|                                         | The cow sticker is centimeter cubes long. |
| 10.                                     | The vase is centimeter cubes long.        |
| 11. Circle the picture that shows the c | orrect way to measure.                    |
| A                                       | В                                         |
|                                         |                                           |
| (TILLIAN)                               | (MINE)                                    |

5 centimeter cubes

3 centimeter cubes

12. How would you fix the picture that shows an incorrect measurement?



A length unit is what we use to measure how long something is. When we measure, we have to be careful that all of the length units we're using are the same size. What length unit did we measure with today?



How is measuring with our new length unit different from measuring with a string, as we did in the last lesson?



What are the ways in which we need to use the centimeter cubes to accurately measure the length of an object? Explain why these are important.



Look at Problem 10. What mistake might someone make in answering this question?



Look at Problem 11. How would you fix the example showing the incorrect way of measuring?

Use your own centimeter cubes to correctly measure the length of the smaller bat.



Can you use the word tall to describe the length of an object? Which objects in the Problem Set could be described as being a certain number of centimeter cubes tall?



Look at your Application Problem. What was Joe using as his tool to compare lengths? Use your hands to show me the length you imagined for his string. Explain your thinking.



Turn to your partner and share what you learned in today's lesson.

What did you get really good at today?

#### Exit Ticket

A STORY OF UNITS

Lesson 4 Exit Ticket 13

| Name | Date |
|------|------|
|      |      |



The picture frame is about \_\_\_\_\_ centimeter cubes long.



2.



The boy's crutch is about \_\_\_\_\_ centimeter cubes long.