Eureka Math

4th Grade
Module 1
Lesson 12

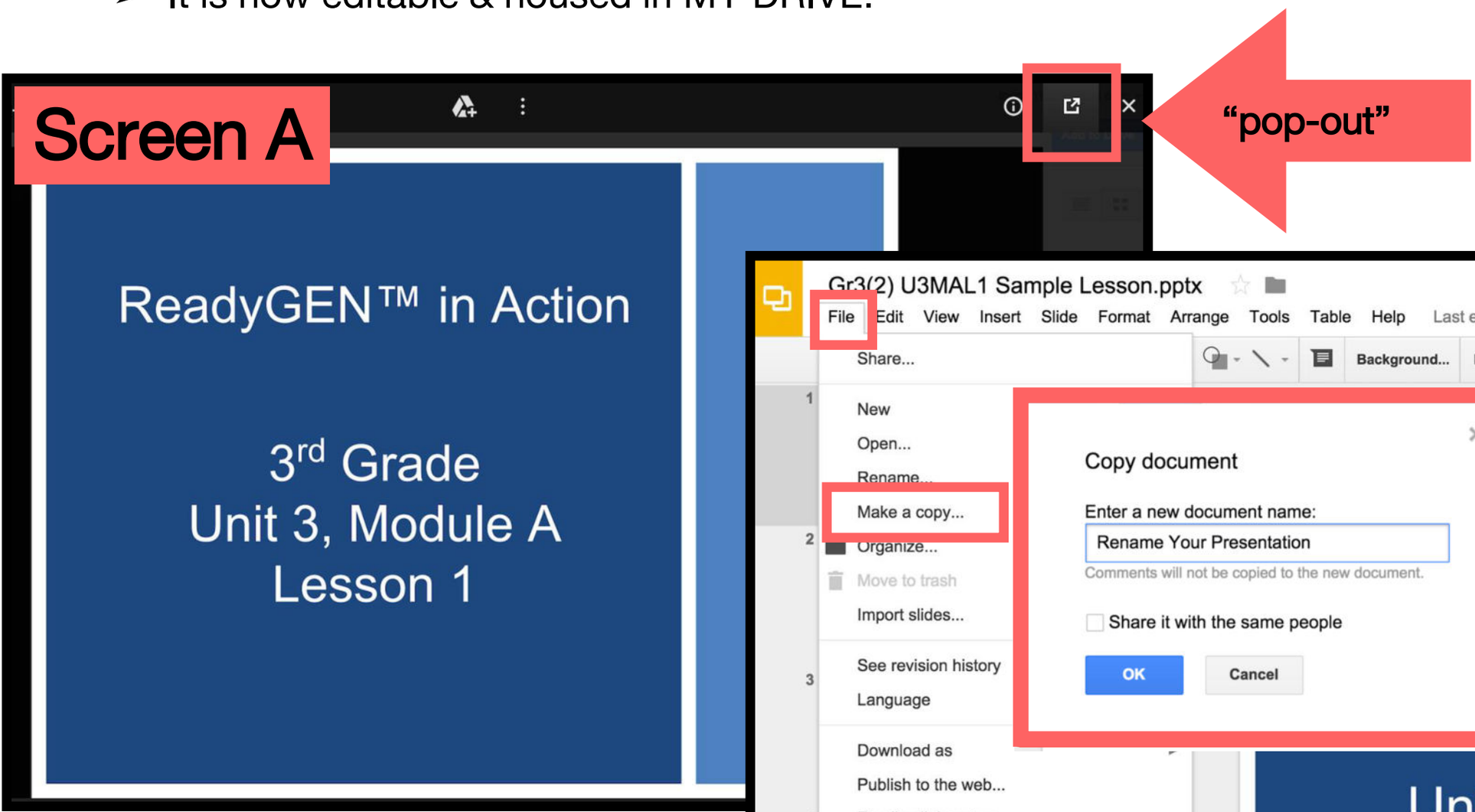
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

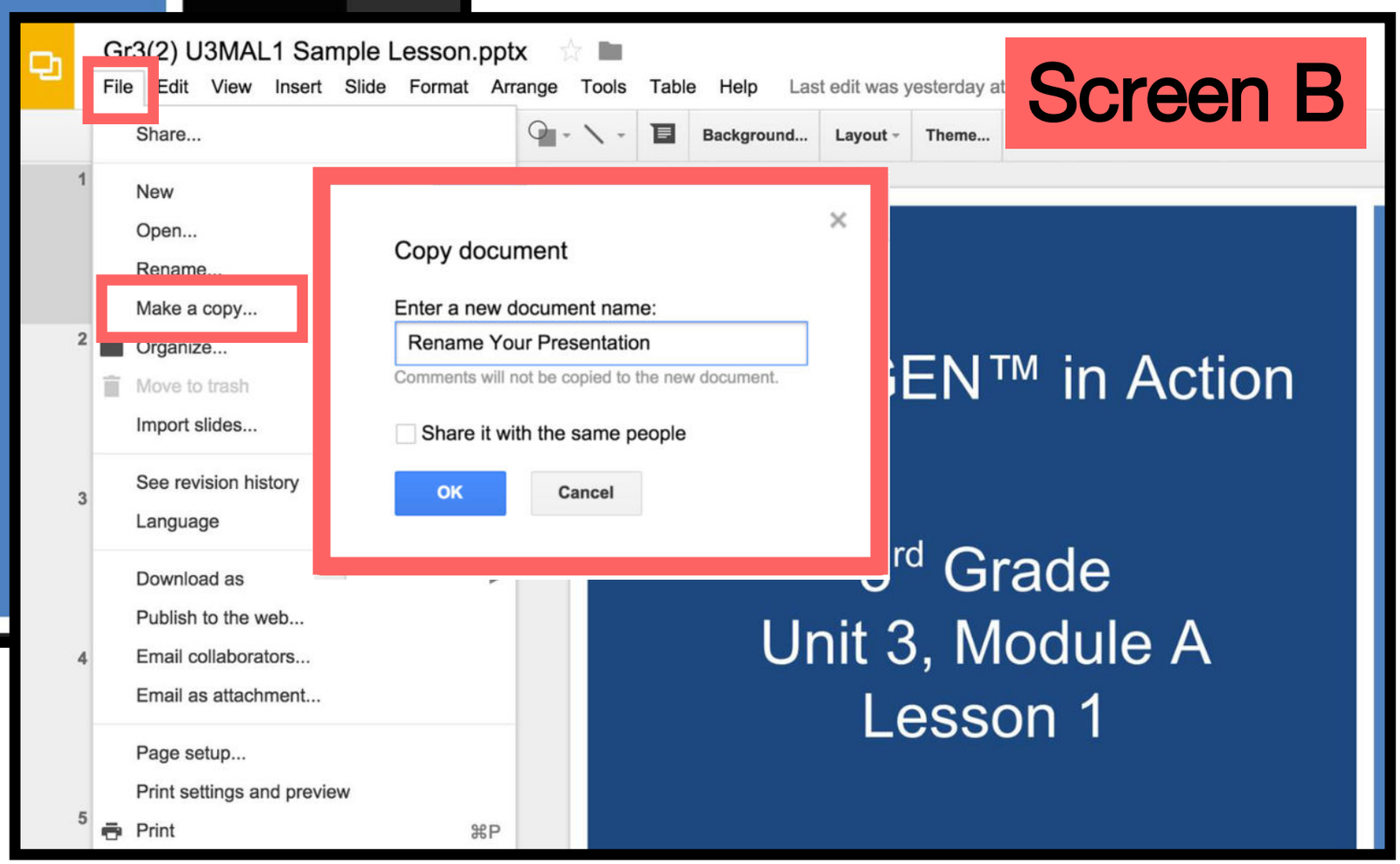
Directions for customizing presentations are available on the next slide.

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.



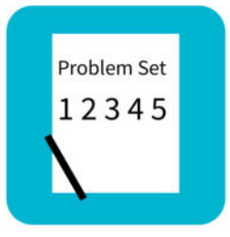


Icons

Read, Draw, Write

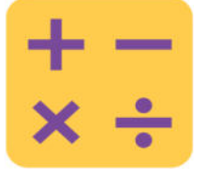
Learning Target

Personal White Board



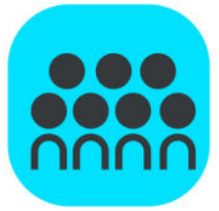
Problem Set

Manipulatives Needed



Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

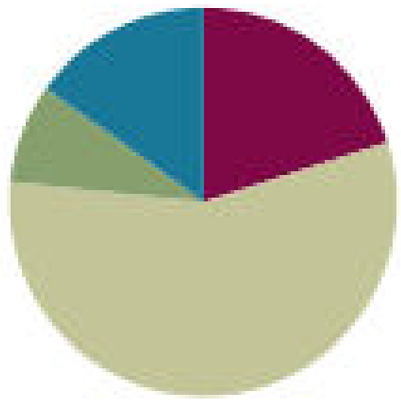
Small Group Time

Lesson 12

Objective: Solve multi-step word problems using the standard addition algorithm modeled with tape diagrams, and assess the reasonableness of answers using rounding.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(34 minutes)
Student Debrief	(9 minutes)
Total Time	**(60 minutes)**



I can solve multi-step word problems using the standard addition algorithm modeled with tape diagrams, and assess the reasonableness of answers using rounding.

Round to Different Place Values

726,354

Say the number.

What digit is in the hundred thousands place?

What’s the value of the digit 7?

On your personal white boards, round the number to the nearest hundred thousand.

Round to Different Place Values

726,354

Say the number.

What digit is in the ten thousands place?

What's the value of the digit?

On your personal white boards, round the number to the nearest ten thousand.

Find the Sum

417 + 232 =____

Solve by writing horizontally or vertically.

7,073 + 2,312 =_____

13,705 + 4,412=_____

3,949 + 451=_____

538 + 385 + 853=_____

23,944 + 6,056 + 159,368.

Application Problem

The basketball team raised a total of $154,694 in September and $29,987 more in October than in September. How much money did they raise in October? Draw a tape diagram, and write your answer in a complete sentence.

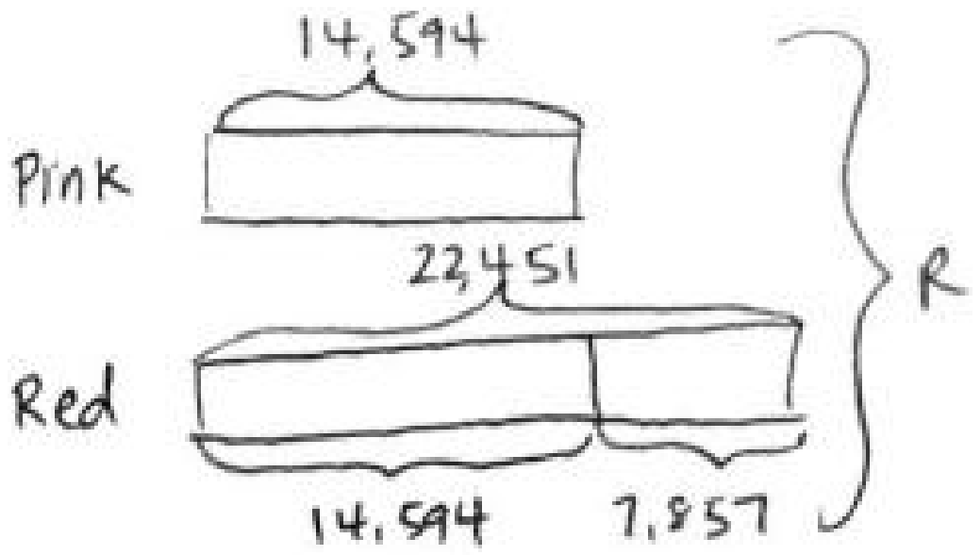
Multi-step Problems

The city flower shop sold 14,594 pink roses on Valentine's Day. They sold 7,857 more red roses than pink roses. How many pink and red roses did the city flower shop sell altogether on Valentine's Day? Use a tape diagram to show the work.

Read the problem with me. What information do we know?

Multi-step Problems

The city flower shop sold 14,594 pink roses on Valentine's Day. They sold 7,857 more red roses than pink roses. How many pink and red roses did the city flower shop sell altogether on Valentine's Day? Use a tape diagram to show the work.



Explain to your partner how this tape diagram models the information given in the problem.

Multi-step Problems

On Saturday, 32,736 more bus tickets were sold than on Sunday. On Sunday, only 17,295 tickets were sold. How many people bought bus tickets over the weekend? Use a tape diagram to show the work.

Tell your partner what information we know.

Multi-step Problems

On Saturday, 32,736 more bus tickets were sold than on Sunday. On Sunday, only 17,295 tickets were sold. How many people bought bus tickets over the weekend? Use a tape diagram to show the work.

With your partner, finish drawing a tape diagram to model this problem. Use B to represent the total number of tickets bought over the weekend.

Multi-step Problems

On Saturday, 32,736 more bus tickets were sold than on Sunday. On Sunday, only 17,295 tickets were sold. How many people bought bus tickets over the weekend? Use a tape diagram to show the work.

Before we solve, estimate to get a general sense of what our answer will be. Round each number to the nearest ten thousand.

Multi-step Problems

On Saturday, 32,736 more bus tickets were sold than on Sunday. On Sunday, only 17,295 tickets were sold. How many people bought bus tickets over the weekend? Use a tape diagram to show the work.

Now, solve with your partner to find the actual number of tickets sold over the weekend.

Multi-step Problems

On Saturday, 32,736 more bus tickets were sold than on Sunday. On Sunday, only 17,295 tickets were sold. How many people bought bus tickets over the weekend? Use a tape diagram to show the work.

Now, let's look back at the estimate we got earlier and compare with our actual answer. Write a statement of the answer

Multi-step Problems

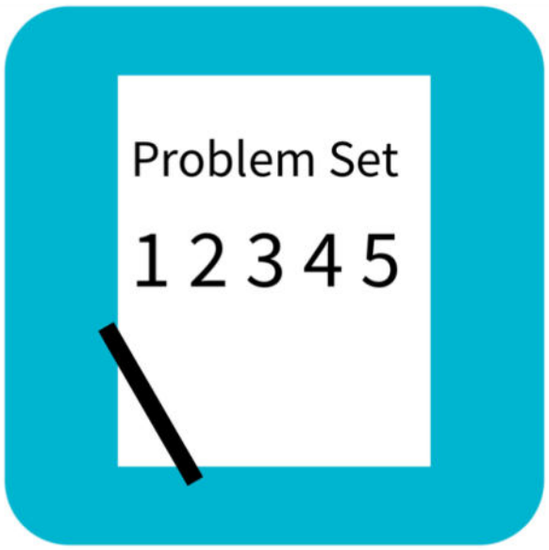
Last year, Big Bill's Department Store sold many pairs of footwear. 118,214 pairs of boots were sold, 37,092 more pairs of sandals than pairs of boots were sold, and 124,417 more pairs of sneakers than pairs of boots were sold. How many pairs of footwear were sold last year?

Discuss with your partner the information we have and the unknown information we want to find.

Multi-step Problems

Last year, Big Bill's Department Store sold many pairs of footwear. 118,214 pairs of boots were sold, 37,092 more pairs of sandals than pairs of boots were sold, and 124,417 more pairs of sneakers than pairs of boots were sold. How many pairs of footwear were sold last year?

With your partner, draw a tape diagram to model this problem. How do you solve for P?



Problem Set

Name _____ Date _____

Estimate and then solve each problem. Model the problem with a tape diagram. Explain if your answer is reasonable.

1. For the bake sale, Connie baked 144 cookies. Esther baked 49 more cookies than Connie.
   a. About how many cookies did Connie and Esther bake? Estimate by rounding each number to the nearest ten before adding.

Debrief

- Explain why we should test to see if our answers are reasonable.
- When might you need to use an estimate in real life?
- In Problem 1, how would your estimate be affected if you rounded all numbers to the nearest hundred? What are the next steps if your estimate is not near the actual answer?
- Consider the example we discussed earlier where the problem was solved incorrectly. Because we had estimated an answer, we knew that our solution was not reasonable.

Exit Ticket

Name _____ Date _____

Model the problem with a tape diagram. Solve and write your answer as a statement.

In January, Scott earned $8,999. In February, he earned $2,387 more than in January. In March, Scott earned the same amount as in February. How much did Scott earn altogether during those three months? Is your answer reasonable? Explain.