Eureka Math

2nd Grade Module 5 Lesson 13

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.



This work by Bethel School District (<u>www.bethelsd.org</u>) is licensed under the Creative Commons Attribution Non-Commercial Share-Alike 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/. Bethel School District Based this work on Eureka Math by Common Core (http://greatminds.net/maps/math/copyright) Eureka Math is licensed under a Creative Commons Attribution Non-Commercial-ShareAlike 4.0 License.

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.
- \succ 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



















Manipulatives Needed







Lesson 13

Objective: Relate manipulative representations to the subtraction algorithm, and use addition to explain why the subtraction method works.

Suggested Lesson Structure

Application Problem
Fluency Practice
Concept Development
Student Debrief
Total Time

(8 minutes) (12 minutes) (30 minutes) (10 minutes) (60 minutes)





I can relate manipulative representations to the subtraction algorithm, and use addition to explain why the subtraction method works.

Materials Needed:



Fluency

• White board

Concept Development:

- (T) Place value disks (19 ones, 19 tens, 10 hundreds),
- (S) Unlabeled hundreds place value chart (Lesson 1 Template 2)
- (S) Place value disks (19 ones, 19 tens, and 10 hundreds),
- (S) Unlabeled hundreds place value chart (Lesson 1 Template 2),
- (S) Personal white board





A fruit seller buys a carton of 90 apples. Finding that 18 of them are rotten, he throws them away. He sells 22 of the ones that are left on Monday. Now, how many apples does he have left to sell?







When I say 9 + 4, you write 10 + 3. Ready? 9 + 4.

When I say 9 + 4, you write 10 + 3. Ready? 9 + 4.

Write the related addition sentence starting with 9 + 4.

19 + 4

9 + 6



Making the Next Hundred



170

Let's find the missing part to make the next hundred. What is the next hundred?

If I say 170, you say the number needed to make 200. Ready? 170.

Give the addition sentence.



What is 2 tens less than 130?

Give the subtraction sentence.

What is 2 hundreds less than 350?

Give the subtraction sentence.





Problem 1: 244 – 121

Read this problem with me. 244 - 121

How would you complete this number bond? Talk to a partner, and use part–whole language.



What do we need to show on our place value charts? Talk to your neighbor.





Problem 1: 244 – 121



123

Today, as we solve subtraction problems, we are going to record our work vertically. 100's 10's 1's

Remember our magnifying glasses! Let's draw an imaginary magnifying glass around 244, since that is the whole.

Like a detective, look carefully at each place to see if we have enough units to subtract moving from the smallest unit to the largest.



Now, using our number bond, I bet it's easy for someone to come up with a related addition problem to check our answer. What problem should we write?

123 + 121

Solve this problem on your personal white board, and turn it over when you have the answer.





Problem 2: 244 – 125





129

Can we subtract 5 ones from 4 ones?

Let's try another problem together. This time, I want you to record your work as I do mine.

Okay, go ahead and show that change using your place value disks. Whatever we do to the place value disks, we must also do in the vertical form. How should we record unbundling a ten?





Problem 3: 312 – 186





187

Let's model another problem together. I'm going to follow what you do. What is different about this problem?

Let's see if we need to unbundle. Do we have enough ones? Do we have enough tens? Let's unbundle to get ready to subtract. What should we do?



Problem Set



- Solve using mental math or vertical form with place value disks. Check your work using addition.
 - a. 138 17 = <u>121</u> b. 138 19 = _____

40



What pattern did you notice in Problem 1(a) and (b)?

For Problem 2(a–d), which problems were you able to solve mentally? Why?

For Problem 2(e) and (f), how is it possible that both problems have the same difference?



Explain to your partner how you used place value disks to solve Problem 2(g) and (h). How did your work with the place value disks match the vertical form?

In Problem 2(i) and (j), did you change 1 hundred for 10 tens or 1 ten for 10 ones? How did you show the change using the algorithm?

How did you use addition to prove that you subtracted correctly? Use part–whole language to explain your thinking.



A STORY OF UNITS	Lesson 13 Exit Ticket 2•5
Name	Date
Solve using mental math or vertic addition.	al form with place value disks. Check your work using
1. 378 – 117 =	2. 378 – 119 =
3. 853 - 433 =	4. 853 - 548 =