The concept development uses the problem set.

Eureka Math

4th Grade
Module 7
Lesson 10

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.

Icons

Read, Draw, Write

Learning Target

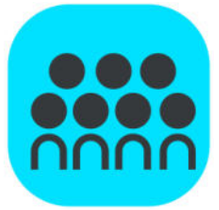
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

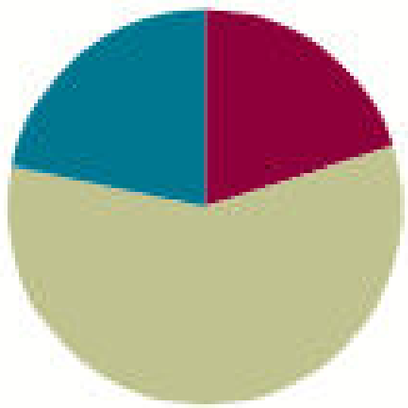
Small Group Time

Lesson 10

Objective: Solve multi-step measurement word problems.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Concept Development	(35 minutes)
Student Debrief	(13 minutes)
Total Time	**(60 minutes)**



I can solve multi-step measurement word problems.

Core Fluency Page

Application Problem

No problem today!

Possible instructional moves

Suggested Delivery of Instruction for Solving Lesson 10's Word Problems

For Problems 1–4 below, students may work in pairs to solve each of the problems using the RDW approach to problem solving.

1. **Model the problem.**

Select two pairs of students who can successfully model the problem to work at the board while the other students work independently or in pairs at their seats. Review the following questions before beginning the first problem.

- Can you draw something?
- What can you draw?
- What conclusions can you make from your drawing?

As students work, circulate. Reiterate the questions above. After two minutes, have the two pairs of students share only their labeled diagrams. For about one minute, have the demonstrating students receive and respond to feedback and questions from their peers.

Possible instructional moves

2. Calculate to solve and write a statement.

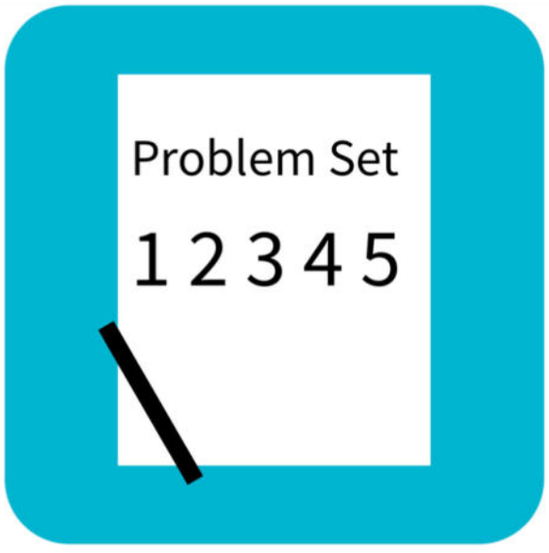
Allow students two minutes to complete work on the problem, sharing their work and thinking with a peer. Have students write their equations and statements of the answer.

3. Assess the solution.

Give students one to two minutes to assess the solutions presented by their peers on the board, comparing the solutions to their own work. Highlight alternative methods to reach the correct solution.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Communicate clear expectations for modeling that allow all students to understand what it takes to become a demonstrating student. Offering a rubric and scaffolds by which students can set and achieve goals may give everyone a fair chance to succeed. Demonstrating students may use translators, interpreters, or sentence frames to present and respond to feedback.



Problem Set

Name _____ Date _____

Use RDW to solve the following problems.

1. Paula's time swimming in the Ironman Triathlon was 1 hour 25 minutes. Her time biking was 5 hours longer than her swimming time. She ran for 4 hours 50 minutes. How long did it take her to complete all three parts of the race?

Debrief

- Look at Problem 2. Discuss with your partner which of your solutions is more efficient.
- Is it more efficient to add or multiply for Problem 2? How does that choice affect the units of the solution?
- Explain to your partner how you solved Problem 3. If you used different strategies, discuss how you arrived at the same answer.
- For Problem 3, is 29 pounds 29 ounces a correct answer? Explain.
- Let's look at how two different students modeled Problem 4. How are they similar? How are they different?
- For Problem 4, how did the drawing of the tape diagram help to find the more efficient way to solve? Why didn't you have to determine Mary's height or the son's height to solve?
- When might it be better to work with the mixed units rather than converting to the smaller unit?
- What are the advantages to knowing several methods for working with units of measurement?

Exit Ticket

Name _____ Date _____

Use RDW to solve the following problem.

Hadley spent 1 hour and 20 minutes completing her math homework, 45 minutes completing her social studies homework, and 30 minutes studying her spelling words. How much time did Hadley spend on homework and studying?