Eureka Math

3rd Grade

Module 2

Lesson 17

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.
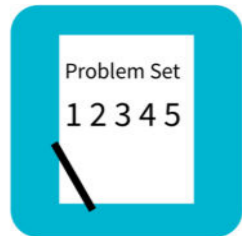
Icons

RDW — Read, Draw, Write
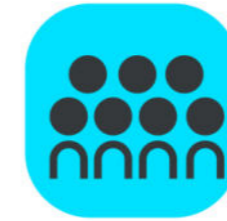
Learning Target

Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share
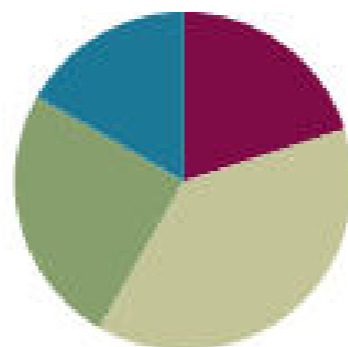
Whole Class

Individual

Partner

Small Group

Small Group Time

Lesson 17

Objective: Estimate sums by rounding and apply to solve measurement word problems.

Suggested Lesson Structure

■ Fluency Practice   (12 minutes)
☐ Concept Development   (23 minutes)
■ Application Problem   (15 minutes)
■ Student Debrief   (10 minutes)
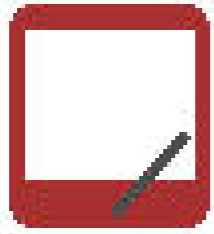
Total Time   **(60 minutes)**

A NOTE ON STANDARDS ALIGNMENT:

In this lesson, students round to the nearest ten, hundred, and fifty and then analyze the precision of each estimate. When estimating sums, students intentionally make choices

I can estimate sums by rounding and use my estimates to solve measurement word problems.
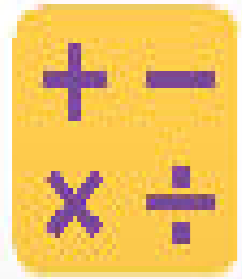
Group Counting (3 mins.)

Threes to 30

 Fours to 40

Sixes to 60

Sevens to 70

Eights to 80

Nines to 90

Sprint:
Round to the Nearest Ten
(9 mins. total)

Concept Development
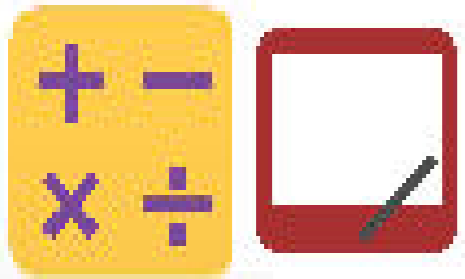
Problem 1: Estimate the sum of 362 + 159 by rounding.

What would my estimate be if I rounded my numbers to the **nearest hundred?**

Answer: 400 + 200 = 600.

Concept Development

Problem 1: Estimate the sum of 362 + 159 by rounding.

What would my estimate be if I rounded my numbers to the **nearest ten?**

Answer: 360 + 160 = 520

Concept Development

Problem 2: Analyze the rounded sums of three expressions with addends close to the halfway point.
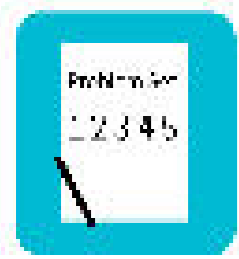
$$349 + 145 = \quad \textcolor{red}{494}$$

$$352 + 145 = \quad \textcolor{red}{497}$$

$$352 + 151 = \quad \textcolor{red}{503}$$

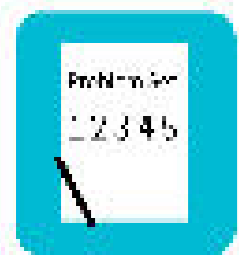Take a minute or two to solve these expressions. What do

Concept Development

What if we had rounded to the **nearest hundred** like we did in the last problem?

349 + 145 = (300 + 100)

352 + 145 = (400 + 100)

352 + 151= (_____ + _____)
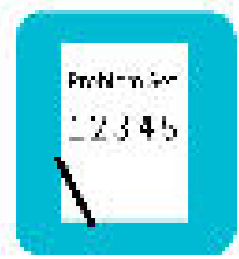
What would that have given us for estimates?

Problem 3: **Round the sum of 296 + 609.**

Analyze how **rounding to the nearest hundred** is *nearly the same* as **rounding to the nearest ten** when both addends are close to a hundred.
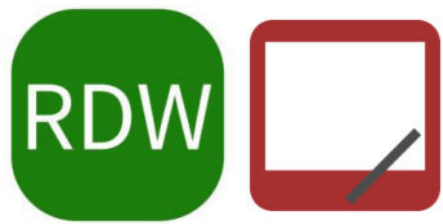
Problem 3: **Round the sum of 296 + 609.**

First round to the **nearest ten**, then try to the **nearest hundred**.

What do you notice about your estimates?

A doctor prescribed 175 milliliters of medicine on Monday and 256 milliliters on Tuesday.

Estimate how much medicine he prescribed both days.

Precisely how much medicine

did he prescribe in both days?

Application Problem

Problem Set (5-10 mins.)

Name _____   Date _____

1. a. Find the actual sum either on paper or using mental math. Round each addend to the nearest hundred, and find the estimated sums.

A

451 + 253 = _____

____ + ____ = _____

451 + 249 = _____

____ + ____ = _____

448 + 249 = _____

____ + ____ = _____

Circle the estimated sum that is the closest to its real sum.

B

356 + 161 = _____

____ + ____ = _____

356 + 148 = _____

____ + ____ = _____

347 + 149 = _____

____ + ____ = _____

Circle the estimated sum that is the closest to its real sum.

C

652 + 158 = _____

____ + ____ = _____

647 + 158 = _____

____ + ____ = _____

647 + 146 = _____

____ + ____ = _____

Circle the estimated sum that is the closest to its real sum.

Student Debrief

What were some of your observations about Problem 1(a)?

What did the closest estimates have in common? Talk to a partner: Which way of rounding in Problem 2 gave an estimate closer to the actual sum?

How does estimation help you check if your answer is reasonable? Why might noticing how close the addends are

Exit Ticket

Name _____   Date _____

Jesse practices the trumpet for a total of 165 minutes during the first week of school. He practices for 245 minutes during the second week.

    a.   Estimate the total amount of time Jesse practices by rounding to the nearest 10 minutes.

    b.   Estimate the total amount of time Jesse practices by rounding to the nearest 100 minutes.