

# Eureka Math

## 3rd Grade Module 2 Lesson 17

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Directions for customizing presentations are available on the next slide.



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# 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.
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- Choose MAKE A COPY and rename your presentation.
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**Screen A**

ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

“pop-out”

**Screen B**

Gr3(2) U3MAL1 Sample Lesson.pptx

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ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

# Icons



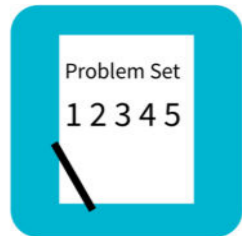
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



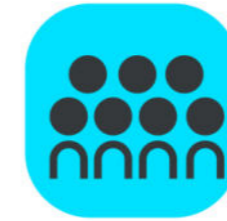
Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



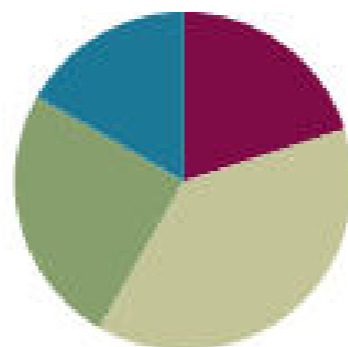
Small Group Time

## Lesson 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)
<b>Total Time</b>	<b>(60 minutes)</b>

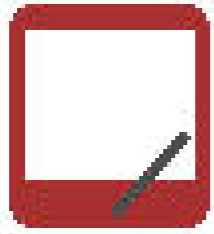
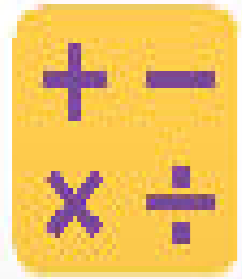


#### A NOTE ON STANDARDS ALIGNMENT:

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

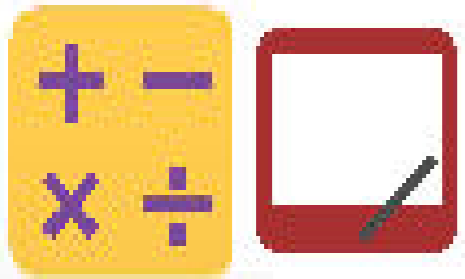
Fours to 40

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.

$$349 + 145 = 494$$

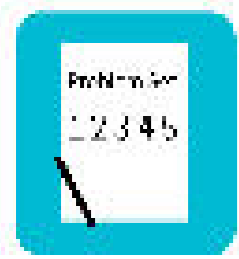
497

$$352 + 145 =$$

503

$$352 + 151 =$$

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



# Concept Development

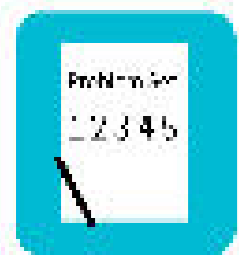
What if we had rounded to the **nearest hundred** like we did in the last problem?

$$349 + 145 = (300 + 100)$$

$$352 + 145 = (400 + 100)$$

$$352 + 151 = (\underline{\quad\quad} + \underline{\quad\quad})$$

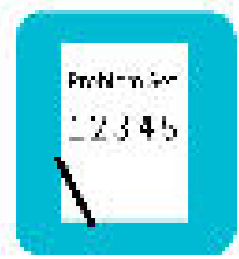
**What would that have given us for estimates?**



# Concept Development

**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.

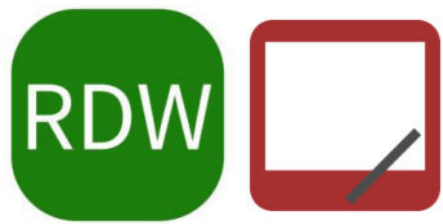


# Concept Development

**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?



# Application Problem

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

$$175 + 256 = 431$$

$$200 + 300 = 500$$

$$180 + 260 = 440$$

$$200 + 256 = 456$$



Rounding to the nearest 100 was easy mental math but not too precise.



Rounding to the nearest 10 was precise, but harder mental math.



Rounding one addend to the nearest 100 is closer than rounding both to 100 and easier mental math than rounding to the nearest 10.



# 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**

$$451 + 253 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$451 + 249 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$448 + 249 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

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

**B**

$$356 + 161 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$356 + 148 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$347 + 149 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

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

**C**

$$652 + 158 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$647 + 158 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

$$647 + 146 = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$
  

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

