

# Eureka Math

## 4th Grade Module 1 Lesson 9

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Directions for customizing presentations are available on the next slide.



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# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



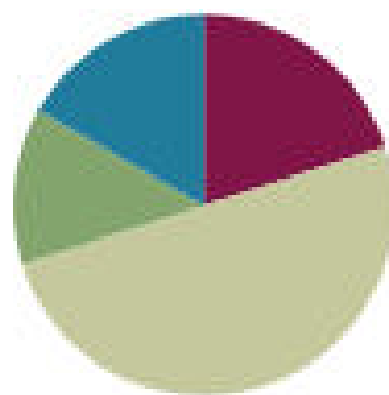
Small Group Time

## Lesson 9

**Objective:** Use place value understanding to round multi-digit numbers to any place value.

### Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(8 minutes)
■ Concept Development	(30 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





I can use place value understanding to round multi-digit numbers to any place value.

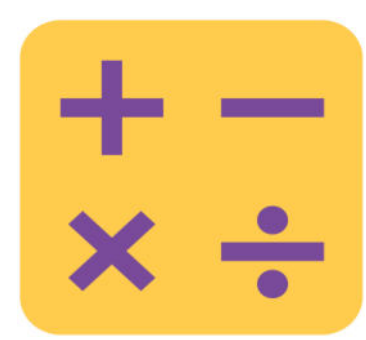


# Multiply by 10

$$10 \times 10 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{1cm}} \text{ ten} \times \underline{\hspace{1cm}} \text{ ten} = 100$$

$$\underline{\hspace{1cm}} \text{ ten} \times \underline{\hspace{1cm}} \text{ ten} = \underline{\hspace{1cm}} \text{ hundred}$$



# Round to different place values

63,941: say it

Round 63,941 to the nearest ten thousand.

Show this on a vertical number line



# Application Problem

34,123 people attended a basketball game. 28,310 people attended a football game. About how many more people attended the basketball game than the football game? Round to the nearest ten thousand to find the answer. Does your answer make sense? What might be a better way to compare attendance.



# Nearest 1,000 w/o number line

4,333 is about \_\_\_\_\_

- We are going to round to the nearest thousand. We need to ask ourselves which two thousands is 4,333 between?
- Let's think of the halfway point. Is 4,333 less than or more than the halfway?
- Since it is less than the halfway, we round 4,333 to 4,000

18,753 is about \_\_\_\_\_

- Round 18,753 to the nearest thousand.
- What two thousands is 18,753 between?
- What is halfway between 18,000 and 19,000?
- Since it is more than the halfway, we round 18,753 to 19,000.





# Rounding to nearest Ten/Hundred thousand w/o number line

65,600 is about \_\_\_\_\_

- Round 65, 600 to the nearest ten thousand.
- Between what two ten thousands is 65,600?
- What is the halfway between 60,000 and 70,000?
- Is 65,600 more or less than 65,000?
- What would you round 65,600 to? Explain why.



# Rounding to nearest Ten/Hundred thousand w/o number line

548,253 is about \_\_\_\_\_


- Round 548,253 to the nearest ten thousand.
- Between what two ten thousands is 548,253?
- What is halfway between 540,000 and 550,000?
- Is 548,253 more or less than 545,000?
- What would you round 548,253 to? Explain why.



# Rounding to nearest Ten/Hundred thousand w/o number line

676,000 is about \_\_\_\_\_

- Round 676,000 to the nearest hundred thousand.
- Between what two hundred thousands is 676,000?
- What is halfway between 600,000 and 700,000?
- Is 676,000 more or less than 650,000?
- What would you round 676,000 to? Explain why.



# Rounding to nearest Ten/Hundred thousand w/o number line

203,302 is about \_\_\_\_\_

- Round 203,302 to the nearest hundred thousand.
- Between what two hundred thousands is 203,302?
- What is halfway between 200,000 and 300,000?
- Is 203,302 more or less than 250,000?
- What would you round 203,302 to? Explain why.



# Round to any place value

- 147,591, whisper read this number to your partner in standard form.
  - Now round the nearest hundred thousand.
- Could I round this a different way to get a more **ACCURATE** estimate?



# Round to any place value

- Now, with a partner, round 147,591 to the nearest thousand, hundred, and tens.



# Problem Set

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Round to the nearest thousand.

a.  $5,300 \approx$  \_\_\_\_\_

b.  $4,589 \approx$  \_\_\_\_\_

c.  $42,099 \approx$  \_\_\_\_\_

d.  $801,504 \approx$  \_\_\_\_\_

e. Explain how you found your answer for Part (d).



# Debrief

- Explain the reasoning behind your answer for problem 2(e) and problem 3(e).
- In problem 2(e), you and your partner probably wrote different numbers that rounded to 30,000. Explain why your numbers were different. What is the smallest possible number that could round to 30,000 when rounded the nearest ten thousand?
- Was there any difficulty in solving problem 3(d)? Explain your strategy when solving this problem.
- In problem 4(b), the newspaper rounded to the nearest hundred thousand inappropriately. What unit should the newspaper have rounded to and why?



# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Round 765,903 to the given place value:

Thousand \_\_\_\_\_

Ten thousand \_\_\_\_\_

Hundred thousand \_\_\_\_\_

2. There are 16,850 Star coffee shops around the world. Round the number of shops to the nearest thousand and ten thousand. Which answer is more accurate? Explain your thinking using pictures, numbers, or words.