Eureka Math

4th Grade Module 1 Lesson 7

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Directions for customizing presentations are available on the next slide.



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Icons





Read, Draw, Write



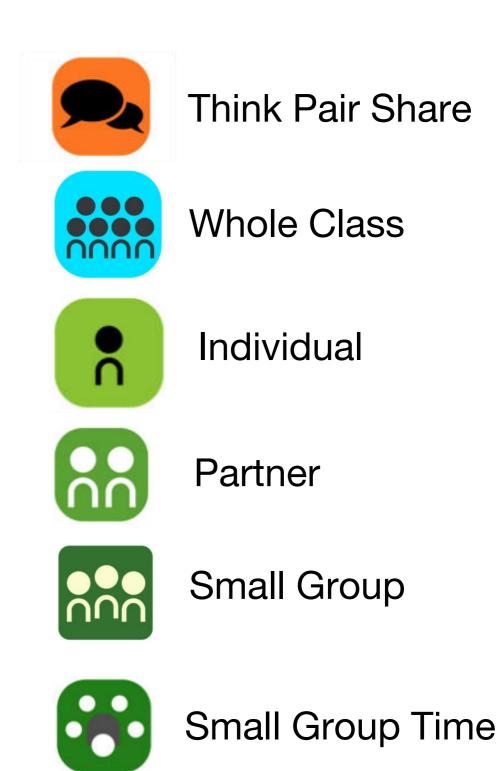








Manipulatives Needed







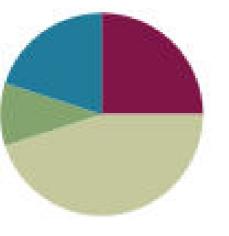
Lesson 7

Objective: Round multi-digit numbers to the thousands place using the vertical number line.

Suggested Lesson Structure

Fluency Practice	(1		
 Application Problem Concept Development Student Debrief 	(6 (2 (1		
		Total Time	(6

(15 minutes) (6 minutes) (27 minutes) (12 minutes) (60 minutes)

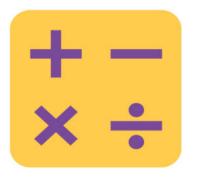




I can round multi-digit numbers to the thousands place using the vertical number line.

Change place value

- On your place value chart write, 3 hundred thousand, 5 ten thousand, 2 thousands, 1 hundred 5 tens and 4 ones.
- What is 100 more?
- What is 10,000 less?
- What is 100,000 more?
- What is 1 less?
- 10 more?

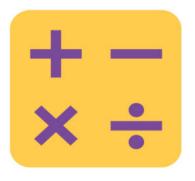


Complete the pattern

92,010, 82,010, 72,010, How did you know what the next number was?

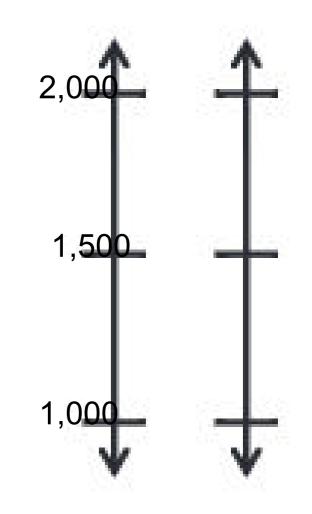
135,004, 136,004, 137,004, _____ How did you know what the next number was?

832,743, 832,643, 832,543, _____ How did you know what the next number was?



Find the midpoint

- What's halfway between 10 and 20?
- What's halfway between 1,000 and 2,000



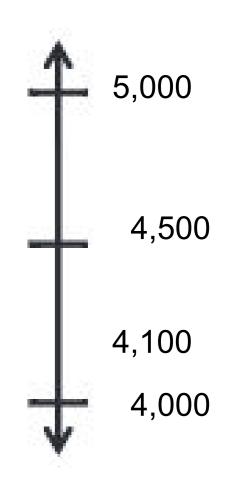
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Application Problem

According to their pedometers, Mrs. Alsup's class took a total of 42,619 steps on Tuesday. On Wednesday, they took ten thousand more steps than they did on Tuesday. On Thursday, they took one thousand fewer steps than they did on Wednesday. How many steps did Mrs. Alsup's class take on Thursday?

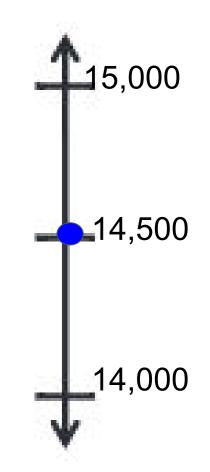
Rounding to nearest thousand

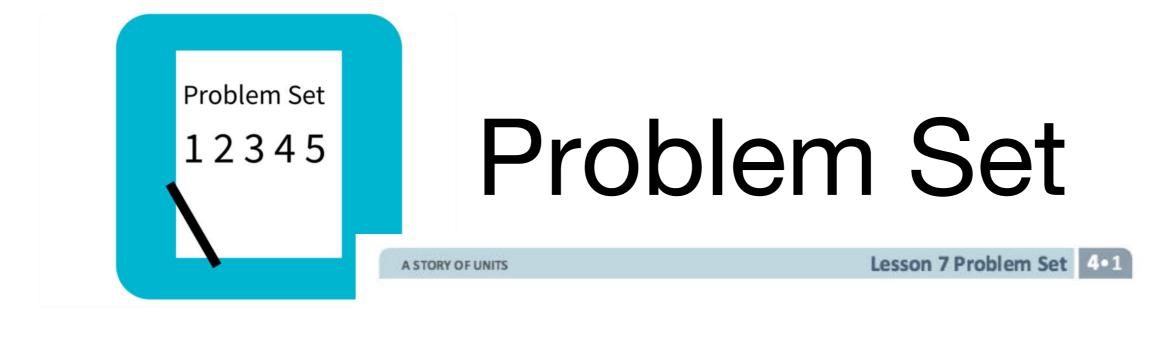
- Draw a vertical number line with 2 endpoints.
- We are going to round 4,100 to the nearest 1,000.
- How many thousands are in 4,100?
- We are going to mark the lower endmark with 4,000.
- What is 1 thousand more?
- We are going to mark the upper endmark with 5,000.
- What is the halfway mark?
- We will mark the midway with 4,500.
- Place 4,100 on the number line.
- Is 4,100 closer to 4,000 or 5,000?
- Therefore, 4,100 to the nearest 1,000 is 4,000.

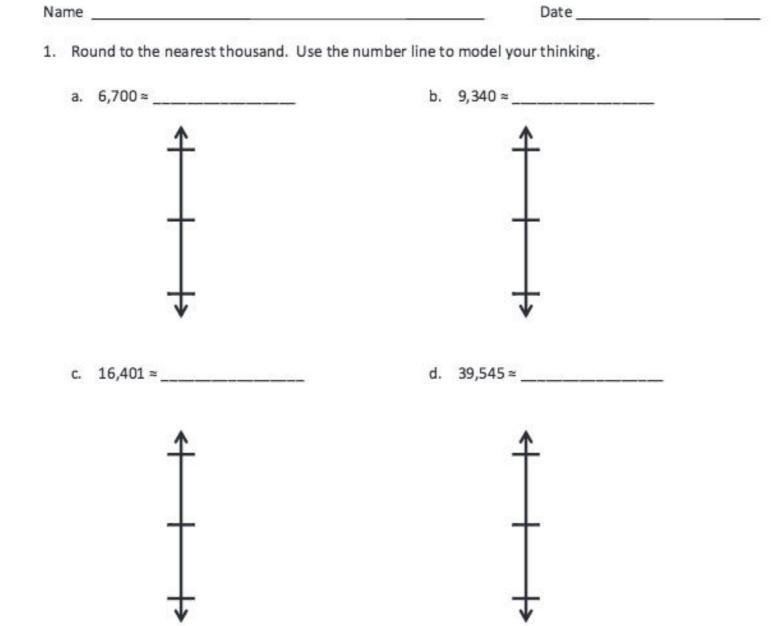


5-6 digit numbers to nearest thousand

- Let's round 14,500 to the nearest thousand.
- How many thousands in 14,500?
- Place 14,000 on the number line.
- What is 1 thousand more?
- Place 15,000 on the number line.
- What is the midway or halfway mark?
- Place 14,500 on the number line.
- Is 14,500 closer to 14,000 or 15,000?
- If a number is at the midway point we round it UP!
- 14,500 rounded to the nearest thousand is 15,000.





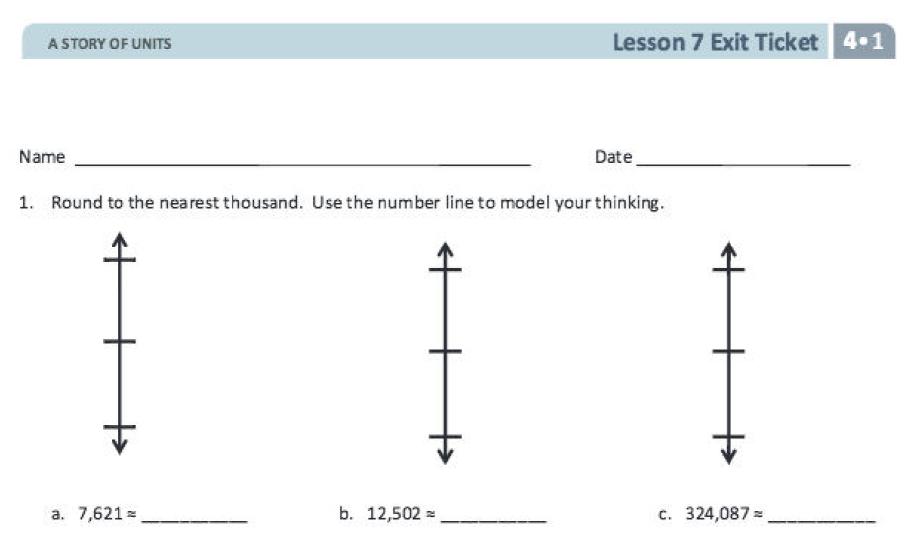




Debrief

- Look at problem 1 in the problem set. Compare how you rounded 6,700 and 16,401. Explain how your rounding to the nearest thousand differed even though both numbers have a 6 in the thousands place.
- What was your strategy for solving problem 4? How did the vertical number line support your thinking?
- What makes 5 special in rounding?
- How does the number line help you round numbers? Is there another way your prefer?
- When might we use rounding or estimation.

Exit Ticket



 It takes 39,090 gallons of water to manufacture a new car. Sammy thinks that rounds up to about 40,000 gallons. Susie thinks it is about 39,000 gallons. Who rounded to the nearest thousand, Sammy or Susie? Use pictures, numbers, or words to explain.