LESSON MAKER PRO

Place Value Detectives

Compare and round numbers by checking each place.

GRADE 4 · 4.NR.1

4.NR.1 "Recognize patterns within the base ten place value system with quantities presented in real-life situations to compare and round multi-digit whole numbers through the hundred-thousands place and compare decimal numbers to the hundredths..."

NAME _____ DATE _____

USE PLACE CLUES

Each place to the left is worth 10 times as much as the place to its right. To compare numbers, start with the greatest place and move right until the digits differ. To round, look at the digit to the right of the place you are rounding to. If it is 5 or more, round up.

WORKED EXAMPLE

Round 471,638 to the nearest ten thousand.

1. The ten-thousands digit is 7.
2. The thousands digit is 1.
3. Because 1 is less than 5, keep the 7.
4. Change all digits to the right to zeros.

Answer: 470,000

PRACTICE 6 problems

1 Write <, >, or =. 58,406 ___ 58,460

ANSWER _____

2 Round 307,851 to the nearest hundred thousand.

ANSWER _____

3 Round 642,349 to the nearest ten thousand.

ANSWER _____

4 Round 92,765 to the nearest thousand.

ANSWER _____

5 Write <, >, or =. 4.37 ___ 4.30

ANSWER _____

6 Write <, >, or =. 0.68 ___ 0.71

ANSWER _____

APPLY IT Show your work

1 During a readathon, the Tigers read 186,742 pages. The Comets read 213,205 pages. Which team read more pages? Round each total to the nearest ten thousand to estimate how many more pages the team read.

WORK SPACE

ANSWER _____

2 At a game club, a digital drawing pack costs $4.08 and a puzzle pack costs $4.80. Which pack costs less?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A gaming tournament had a whole-number attendance. The attendance rounds to 300,000 to the nearest hundred thousand and to 270,000 to the nearest ten thousand. What is the greatest possible attendance? Explain your reasoning.

WORK SPACE AND ANSWER

ANSWER KEY

Place Value Detectives

GRADE 4 · 4.NR.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write <, >, or =. 58,406 ___ 58,460	**58,406 < 58,460**
2	Round 307,851 to the nearest hundred thousand.	**300,000**
3	Round 642,349 to the nearest ten thousand.	**640,000**
4	Round 92,765 to the nearest thousand.	**93,000**
5	Write <, >, or =. 4.37 ___ 4.30	**4.37 > 4.30**
6	Write <, >, or =. 0.68 ___ 0.71	**0.68 < 0.71**

PART 2 · APPLY IT

1. **The Comets read more pages. 186,742 rounds to 190,000 and 213,205 rounds to 210,000, so the estimate is 20,000 more pages.** Compare the hundred-thousands digits to find that the Comets read more. Round both totals to the nearest ten thousand, then subtract 190,000 from 210,000.
2. **The digital drawing pack costs less, because $4.08 < $4.80.** Both prices have 4 ones. Compare the tenths digits, 0 tenths is less than 8 tenths.

CHALLENGE

274,999. Numbers that round to 270,000 to the nearest ten thousand go from 265,000 through 274,999, and 274,999 also rounds to 300,000 to the nearest hundred thousand.

Accept correct comparison symbols. For the challenge, accept an explanation that identifies 274,999 as the largest number that rounds to both stated values.