

2 Develop the Concept: Interactive

 10–15 min

Interactive Learning

Overview Students use place-value charts to compare three 4-digit numbers and order numbers.

 **Essential Question** How can you order numbers?

Materials Interactive Learning Recording Sheet 2



Set the Purpose *You know how to compare two numbers. Today, you will compare three 4-digit numbers and write them in order from greatest to least and from least to greatest.*

Connect Have 5 volunteers come to the front of the class and line up in any order. *How might you order these students?* [by height, by alphabetical order of names]

Pose the Problem

Distribute the recording sheet. *The recording sheet shows the height of some of the world's highest waterfalls. How do you know which height is greatest? Put the numbers in order from greatest to least.* [3,212; 3,110; 2,425] Have students work in pairs and share their answers with the class.

Model/ Demonstrate

Draw a place-value chart on the board and ask students to tell you how to write the numbers in the chart. *Which number has the least number of thousands?* [2,425] *That means 2,425 is the least number. How can you tell whether 3,212 or 3,110 is the greater number?* [Since both numbers have the same digit in the thousands place, look at the hundreds place. Since $2 > 1$, the greater number is 3,212.] *Order the numbers from greatest to least on the recording sheet.* [3,212; 3,110; 2,425] *How can you order the numbers from least to greatest?* [Reverse the order; 2,425; 3,110; 3,212]

Small-Group Interaction

Write the numbers 6,405, 5,406, and 5,431 on the board. *Use the chart on your recording sheet to order the numbers.* Have students work in pairs. One student orders the numbers from greatest to least. [6,405; 5,431; 5,406] The other orders them from least to greatest. [5,406; 5,431; 6,405] Ask volunteers to explain how they used place value to order the digits.

Name Galo

Interactive Learning Recording Sheet 2

4-Digit Place-Value Charts

Tugela Falls 3,110 feet	Yosemite Falls 2,425 feet	Angel Falls 3,212 feet
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Thousands	Hundreds	Tens	Ones
3	2	1	2
3	1	1	0
2	4	2	5

Ordered from greatest to least 3,212, 3,110, 2,425

Ordered from least to greatest 2,425, 3,110, 3,212

Thousands	Hundreds	Tens	Ones
6	4	0	5
5	4	0	6
5	4	3	1

Ordered from greatest to least 6,405, 5,431, 5,406

Ordered from least to greatest 5,406, 5,431, 6,405

86 Topic 1



Jose says that the middle number is the same when you order numbers from greatest to least and from least to greatest. Is this always true? [Only when there is an odd number of items to order]



eTools Place-Value Blocks
www.pearsonsuccessnet.com

Link to Investigations, Second Edition

Joint-Usage Master Plan
Blended Instruction (Plan 1):
Topic 1 and Units 1, 3, and 8