Compare Multi-Digit Numbers

Name _____

Learning Target: Use place value to compare two multi-digit numbers.
Success Criteria:
- I can explain how to compare two numbers with the same number of digits.
- I can use the symbols <, >, and = to compare two numbers.

Think and Grow

Example   Compare 2,752,822,582 and 2,752,820,148.

Use a place value chart.

Billions Period			Millions Period			Thousands Period			Ones Period		
H	T	O	H	T	O	H	T	O	H	T	O
		2,	7	5	2,	8	2	2,	5	8	2
		2,	7	5	2,	8	2	0,	1	4	8

Start at the left. Compare the digits in each place until the digits differ.

Step 1: Compare the billions.

2,752,822,582

2,752,820,148

2 billions ( ) 2 billions

Step 2: Compare the hundred millions.

2,752,822,582

2,752,820,148

7 hundred millions ( ) 7 hundred millions

Step 3: Compare the ten millions.

2,752,822,582

2,752,820,148

5 ten millions ( ) 5 ten millions

Step 4: Continue to compare until digits differ.

2,752,822,582

2,752,820,148

2 thousands ( ) 0 thousands

So, 2,752,822,582 ( ) 2,752,820,148.

Show and Grow

Compare.

1. 83,200,158 ( ) 81,254,167

2. 7,141,825 ( ) 7,141,635

3. 8,491,325,012 ( ) 8,491,325,012

4. 275,178,201 ( ) 12,275,178,201

Practice

Compare.

5. 67,200 ◯ 67,200,827

6. 679,561,248,000 ◯ 9,561,248,000

7. 303,224,728,149 ◯ 103,224,728,149

8. 10,524,897 ◯ 9,624,218,579

9. 51,348,524 ◯ 51,348,425

10. 893,046,250 ◯ 700,000,000,000 + 80 + 9

11. 600,140 ◯ six hundred million, fourteen

12. eight billion ◯ 8,000,000,000

13. 500,000,000,000 + 40,000,000 + 1,000 + 7 ◯ 500,000,000,000 + 40,000,000 + 2,000

14. **YOU BE THE TEACHER** Your friend says that 946,215,844 is greater than 6,245,854,246 because 9 is greater than 6. Is your friend correct? Explain.

15. **MP** **Number Sense** Is 24,154,070,001 greater than or less than twenty-four billion, one hundred fifty-four million, seventeen thousand, one? Explain.

Open-Ended Complete the number to make the statement true. Explain how you chose your digit(s).

16. 270,644,982,245 > 270,6◻4,982,245

17. 764,824,154 < 76◻,824,1◻4

18. **Modeling Real Life** Use the table.

A city planner receives 3 estimates for the construction of an apartment complex. Order the estimates from least to greatest.

....

Which estimate should the city planner choose? Explain.

Apartment Complex Estimates	
A	$51,668,254
B	$45,824,564
C	$51,725,340