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Math 4

1-4 Comparing Whole Numbers

Name:		Date:	

Common Core Standards	CCSS.MATH.CONTENT.4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

1-4 Comparing Whole Numbers

Comparison Statements

What does it mean to compare?

To compare means to look for similarities or differences between two different things (or numbers).

How do we express a comparison?

After we look for similarities and differences between our numbers we can write a comparison statement.

- **Are the numbers equal, or unequal?**
  If the numbers are unequal we can write an inequality statement.

To write an inequality statement we use these different symbols to <u>express the inequality.</u>

< less than :

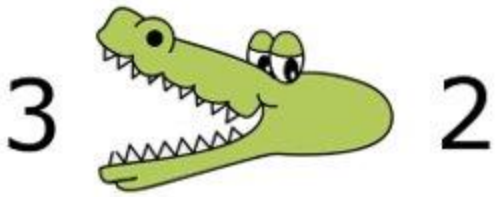
the number on the left has a value less than the number on the right

> greater than :

the number on the left has a value greater than the number on the right

= equal to :

The numbers have the same exact value



3 is greater than two

3 > 2

Just remember Gary Gator always "eats" the bigger number!

We can use place value to visualize how to compare large numbers

1. Compare the numbers in their designated periods

2. Look at the highest place value and compare those numbers

Let's compare these two numbers:

3,461,582 **4,358,761**

Identify:

Place the numbers in their correct period

Fill in the table below for the above numbers:

Millions Period			Thousands Period			Hundreds Period		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

What was the highest place value where they had a difference?

_____

Write your comparison statement as a sentence with the numbers expressed in their word form.

_____

_____

_____

_____

Comparing Whole Numbers

Situation:

1. **Chris has two large water jugs where he stores his pennies. He wanted to count his money out to know which one had a greater value than the other.**

Water jug 1 has 9,520 pennies in it.
Water jug 2 has 7,431 pennies in it.

Fill out the place value chart and express with the symbols > , < , or = to tell which water jug has the greater number of pennies in it.

Millions Period			Thousands Period			Hundreds Period		
Hundreds	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**	**Hundreds**	**Tens**	**Ones**

9,520 _____ 7,431

Part A: Compare the numbers .

Which number should Gary Gator "eat"?

Place the appropriate symbol to express that.

1. 57,301 _____ 59,342

2. 782,465 _____ 825,913

Part B: Complete the Table below:

The first one is done for you

100,000 less	10,000 less	Number	10,000 more	100,000 more
2,795,043	2,885,043	2,895,043	2,905,043	2,995,043
		376,092		
		7,525,276		

Part C: Cut out the Gary Gators and match him with the expression.





Gary

7,398		4,000 + 900 + 50 + 1
97,284		ninety-seven thousand, four hundred eighty-six
(8x10,000)+(4x1,000)+(7x100)+(3x10)+(5x1)		98,365
1,289,479		one million, two-hundred eighty-six thousand, five hundred eighty
8,093		8,000 + 900 + 90 + 3

Answer Key

Millions Period			Thousands Period			Hundreds Period		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		3	4	6	1	5	8	2
		4	3	5	8	7	6	1

What was the highest place value where they had a difference?

The millions place

Write your comparison statement as a sentence with the numbers expressed in their word form.

Three million, four hundred sixty-one thousand, five hundred eighty-two is less than Four million, three hundred fifty-eight thousand, seven hundred sixty-one.

Millions Period			Thousands Period			Hundreds Period		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
					9	5	2	0
					7	4	3	1

9,520 > 7,431

3. 57,301 < 59,342

4. 782,465 < 825,913

Part B:

100,000 less	10,000 less	Number	10,000 more	100,000 more
2,795,043	2,885,043	2,895,043	2,905,043	2,995,043
276,092	366,092	376,092	386,092	476,092
7,425,276	7,515,275	7,525,276	7,535,276	7,625,276

Part C:

Gary

7,398		4,000 + 900 + 50 + 1
97,284		ninety-seven thousand, four hundred eighty-six
(8x10,000)+(4x1,000)+(7x 100)+(3x10)+(5x1)		98,365
1,289,479		one million, two-hundred eighty-six thousand, five hundred eighty
8,093		8,000 + 900 + 90 + 3