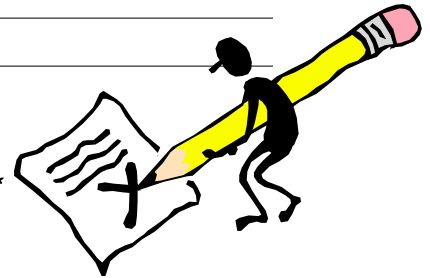


Homeroom: R

Name: _____

Date: _____

Math Journal



Learning Target

I can compare and order whole numbers, and write expanded form through 1,000,000.

Did you know... as of 2012, there were approximately 9,500,000 people living in the city of Kinshasa, about 82,000,000 people living in the country of Democratic Republic of the Congo, and over 1,200,000,000 people living on the continent of Africa?



With these numbers in mind, think about WHY it might be important to be accurate about large numbers. Record your thoughts in the space below.



Expanded Form

One way to show a large number, in order to clearly understand the value of each digit, is to write it in e x p a n d e d form.



Example: **5,843 =**

Word Form = **five thousand, eight hundred forty-three**

Number-Word Form: **5 thousands, 8 hundreds, 4 tens, 3 ones.**

Expanded Form: **5,000 + 800 + 40 + 3**

Expanded Notation: **(5 × 1,000) + (8 × 100) + (4 × 10) + (3 × 1)**



Try It!

Standard Form: **42,853**

Number-Word Form:

Expanded Form:

Expanded Notation:

Comparing Numbers Using $>$, $<$, $=$

Large numbers can not only be read, they can be compared.

Take time to compare the two numbers below. Which number is greater?

25, 388

13,476

Write a comparison sentence showing which number is greater than the other.



Discuss with a partner how you determine which number is greater.
Record your thinking in the space below.



How would mathematicians write a comparison, using the same numbers above,
to show a less than relationship? .

_____ $<$ _____

Discuss with a partner how you determine which number is less.

Record your thinking in the space below.



Read Aloud: How Much is a Million? by David M. Schwartz

Use the space below to jot down your thoughts, while reading.

I would like a million _____,
but not a million _____.

Social Studies & Technology Connection:

Many cities around the world have populations in the millions.

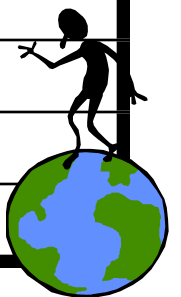
Work with your table group to **identify** 10 such cities.

List your cities and their populations in the space below.

Then, **order** your list with the smallest first. **Post** your list on the class Padlet.



Order	City	Population



Place Value to 1,000,000



Did you know, the number below is the population of Lumbumbashi, Haut-Katanga, DRC?

1,373,770

This number is read: one MILLION, three hundred seventy-three THOUSAND, seven hundred seventy.

In large numbers, the *COMMAS* are used to separate the digits into groups of three, starting at the right.

A place value chart is a tool that can help you understand and read large numbers.

Billions Period	Millions Period			Thousands Period			Ones Period		
ones	hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones

Digging Deep into Digits

Three of the digits in the number **1,373,770** are sevens (7s).

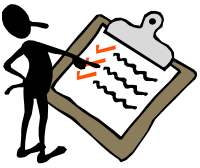


Compare the value of these three sevens (7s)?

Important Ideas!



- * The same digit in a different place *CANNOT* stand for the same amount.
- * The value of the digit one place to the left is always 10 times (more) the value of the digit one place to the right in a whole number.



Try It

Describe the circled and underlined numbers and their relationship to one another.

1, 373, 770

Billions Period			Millions Period			Thousands Period			Ones Period			Decimals		
x 10			x 10			x 10			x 10			x 10		
Hundred H	Ten T	One O	Hundred H	Ten T	One O	Hundred H	Ten T	One O	Hundred H	Ten T	One O	Tenths	Hundredths	Thousandths
hundred billions	ten billions	one billions	hundred millions	ten millions	one millions	hundred thousands	ten thousands	one thousands	hundreds	tens	ones	tenths	hundredths	thousandths
÷ 10			÷ 10			÷ 10			÷ 10			÷ 10		



Try It

In 2016, the population of Brazzaville was one MILLION, 83 THOUSAND people. Is its population greater than or less than Kinshasa? Write a comparison statement and explain.

Let's revisit the number **1,373,770**.

How many **hundred thousands** are in this number? _____

How many **ten thousands** are in this number? _____

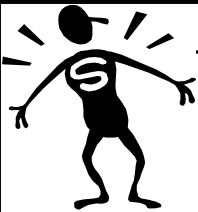
How many **thousands** are in this number? _____

How many **tens** are in this number? _____

How many **ones** are in this number? _____

Use this information to write this number in expanded **FORM**:

Use this information to write this number in expanded **NOTATION**:



Brain Builder Bonus

How many years is 1,000,000 **days**? _____

About how many years is 1,000,000 **hours**? _____

If you are nine years old today, how old will you be in 1,000,000 **minutes**? _____

What will the date be in a million **seconds** from today? _____

Name something that happened 1 million **days** ago. _____

Name something that happened 1 million **hours** ago. _____

Name something that happened 1 million **minutes** ago. _____

Name something that happened 1 million **seconds** ago. _____