Name: _____ **Numbers to One Million**

Place Value Chart								
Millions			Thousands			Ones		
Hundred Million	Ten Million	Million	Hundred Thousands	Ten Thousands	Thousands	Hundred	Tens	Ones
100,000,000	10,000,000	1,000,000	100,000	10,000	1,000	100	10	1

So far, you have only used numbers up to thousands. Now we are going to look at larger numbers up to one million. Look at the chart above. It shows the names of the number places and their *values* (through the millions).

Each place has a value that is 10 times the value of the place directly to its right. This is why we say that our system is a base 10 system.

The value of the tens place is 10 times the value of the ones place.
The value of the hundreds place is 10 times the value of the tens place.
The value of the thousands place is ten times the value of the hundreds place.

Directly to the left of the *thousands* place is the *ten thousands* place. Its value is 10 times the value of the *thousands* place, or 10,000.

Directly to the left of the *ten thousands* place is the *hundred thousands* place. Its value is 10 times the value of the *ten thousands* place, or 100,000.

Directly to the left of the *hundred thousands* place is the *millions* place. Its value is 10 times the value of the *hundred thousands* place, or 1,000,000.

For now we won't worry about places larger than the *millions* place.

A 6 in the ten thousands place has a value equal to 6 x 10,000 = 60,000.

A 6 in the hundred thousands place has a value equal to 6 x 100,000 = 600,000.

Notice in the chart above that the number places are put into three groups—the ones group, the thousands group and the millions group. When we write large numbers we separate these groups with commas.

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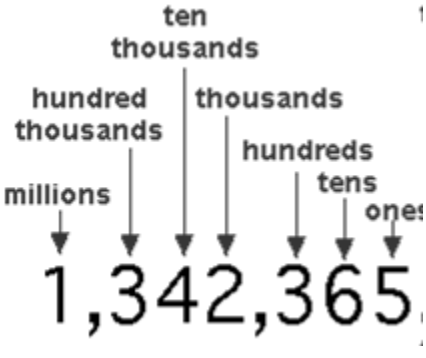

In the number to the left, notice that the thousands group is separated from the ones group with a comma, and the millions are separated from the thousands group with a comma.

The number *1,342,365* is read "one *million*, three hundred forty two *thousand*, three hundred sixty five."

Notice that each group (separated by commas) is read as if it were its own number and then the group name is tacked on—except we don't say "ones" after the ones group.

If a group has *only zeros* in it, we don't say the group. We read 1,000,231 as "one million, two hundred thirty one."

Read the following numbers:

46,573	509,700	1,001,001	1,478,000
7,001	1,333,333	1,200,200	1,000,064
267,040	390,911	1,060,600	300,004

We can write the number 1,342,365 in expanded notation as:
1,000,000 + 300,000 + 40,000 + 2,000 + 300 + 60 + 5

Write the following numbers in expanded notation:

1,345,678 =

340,308 =

502,079 =

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The digit 3 in the number 12<u>3</u>,654 is in the <u>thousands</u> place. It has a *value* equal to 3 x 1000 = 3000. So the *value* of the digit 3 is 3,000.

The digit 2 in the number 1<u>2</u>3,654 is in the <u>ten thousands</u> place. It has a *value* equal to 2 x 10,000 = 20,000. So the *value* of the digit 2 is 20,000.

The digit 1 in the number <u>1</u>23,654 is in the <u>hundred thousands</u> place. It has a *value* equal to 1 x 100,000 = 100,000. So the *value* of the digit 1 is 100,000.

1. What is the *value* of the digit 4 in 1,3<u>4</u>8,569?

2. What is the *value* of the digit 4 in 1,65<u>4</u>,712?

3. What is the *value* of the digit 4 in 1,<u>4</u>33,231?

4. What is the *value* of the digit 4 in 1,365,6<u>4</u>2?

5. In the number 3**2**<u>2</u>,546 the *value* of the bold digit **2** is _____ x the value of the underlined digit <u>2</u>.

6. In the number **6**<u>6</u>2,134 the value of the bold digit **6** is _____ x the value of the underlined digit <u>6</u>.

7. In the number 13**4**,<u>4</u>65 the value of the bold digit **4** is _____ x the value of the underlined digit <u>4</u>.

8. In the number **1**,<u>1</u>34,502 the value of the bold digit **1** is _____ x the value of the underlined digit <u>1</u>.