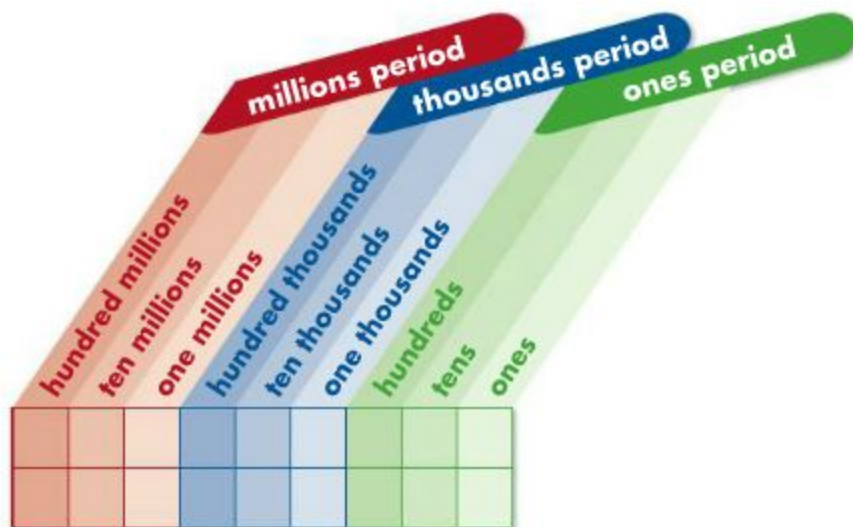


## Topic 1: Generalize Place Value

### Lesson 1-1: Numbers Through One Million

*\*A place value chart is a helpful tool to understand what digits go in the appropriate places.\**



**Expanded Form:** Shows the sum of the values of each digit. *Example:* 1,430,267 is  $1,000,000 + 400,000 + 30,000 + 200 + 60 + 7$

**Number Name:** is the number written in words. *Example:* 1,430,267 is one million, four hundred thirty thousand, two hundred sixty-seven

### Lesson 1-2: Place value relations

*\*A place value chart is going to be a helpful tool to utilize throughout this topic.\**

*In a number, if two digits are the same, you can compare them.*

*Examples:*

*\*If the two digits that are the same are right next to each other, the digit to the left is 10X greater than the digit to the right.\**

675,542 The five in the thousands column is 10X greater than the 5 in the hundreds column.

*\*For each place the similar digits are separated, you must add another zero.\**

657,542 The five in the ten thousands column is 100X greater than the 5 in the hundreds column.

567,542 The five in the hundred thousands column is 1,000X greater than the 5 in the hundreds column.

*This pattern will continue on depending on how many places the similar digits are apart from one another.*

### Lesson 1-3: Compare Whole Numbers

*\*When comparing whole numbers you will be using the  $>$ ,  $<$ , and  $=$  sign. I have found the easiest way to compare numbers is to line them up on top of each other at the ones column. Then check from left to right. When you find a number that is greater, that is the greater number. Example:*

46,534 $>$   
46,524

18,905 $>$   
9,999

7,844 $<$   
7,845

341 $<$   
356

1,234,567 $<$   
1,235,567

#### **Lesson 1-4: Round Whole Numbers**

- **Step 1:** Identify the place they want you to round to. (Personally, I like to underline that digit.)
- **Step 2:** Look at the digit to the right
  - \*If the digit to the right of the place you are rounding to is 4 or less, keep the digit you underlined the same and make all of the digits to the right zeros.
  - \*If the digit to the right of the place you are rounding to is 5 or greater, increase the value of the digit in the place you are rounding to by 1 and make all of the digits to the right zeros.

*Here is an example following these steps: Round 423,560 to the nearest Ten Thousands*

- **Step 1:** 423,560 (I found the Ten Thousands place and underlined it.)
- **Step 2:** The digit to the right of the Ten Thousands place is a three. I am going to keep the 4 and the 2 and make the rest of the digits zeros.
- **Answer:** 420,000

#### **Lesson 1-5: Math Practices and Problem Solving: Construct Arguments**

*\*Constructing an argument is important in not just writing, but math as well.\**

- Give an explanation that is clear and complete.
- Use numbers and symbols correctly in your explanation.
- Use numbers, objects, drawings, or actions to justify your arguments.
- Use a counter example in your argument.

*Some questions to ask yourself after this Topic.*

- What lesson did I find the easiest? Was it easy enough that you could teach this lesson to someone?
- Did the notes help?
- Which lesson did you find the most difficult?
- Did you recheck your notes?
- Is there someone in class that could help you with the lesson you are having difficulty with?
- Did you look at the reteaching pages on pages; 37, 38?

#### **Vocabulary:**

- A group of three digits, starting from the right, separated by commas is called a period.
- A process that determines what multiple of 10, 100, 1,000 and so on, a number is closest to is called rounding.
- A statement that is believed to be true, but has yet to be proven is called conjecture.
- The value given to a place a digit has in a number is called its place value.

**Topic 1 Test Study Guide:** (Click the following link.)

[Topic 1 Study Guide](#)