4.1 - Place Value Study Guide

Learning Goals

I can...

a) identify orally and in writing the place value for each digit in a whole number expressed through millions;
b) compare two whole numbers expressed through millions, using symbols (>, <, or =); and
c) round whole numbers expressed through millions to the nearest thousand, ten thousand, and hundred thousand.

Vocabulary

Place Value - The value a digit *represents* depending on its place in the number

MILLIONS			THOUSANDS			ONES		
hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
7	4	5	3	0	9	2	8	1

Value - How much a digit is *worth* according to its place in a number
Digit - There are 10 digits; any one of the symbols, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
Greater Than = (>)
Less Than = (<)
Equal To = (=)
Rounding - means reducing the digits in a number while trying to keep its value similar
   "4 or less, take a rest" "5 or more, raise the score"
Compare – seeing whether two numbers are equal, greater than, or less than each other.
Standard form – using digits to express a number (2,046)
Written form – using words to express a number (two thousand, forty-six)
Expanded form – A way to break up a number to show how much each digit in the number
   represents. (2,000 + 40 + 6)
Period- Each group of three numbers is called a period (ones period, thousands period, millions period)

Practice At Home

- Lots of fun Place Value games - http://www.gamequarium.com/placevalue.html

- Practice reading numbers - http://www.mathcats.com/explore/reallybignumbers.html

- Place Value game - http://education.jlab.org/placevalue/

- Check out www.portaportal.com. Sign in with the username hes4th and the password hes. Look for games and more under the place value section!

Sample Questions

1. What is the value of the 7 in the numeral 1,371,211?

A. 7
B. 70
C. 7,000
D. 70,000

2. What is the numeral 5,302,985 in written format?

A. Five million, three hundred and two thousand, nine hundred and eighty-five
B. Five million, three and two thousand, nine and eighty-five
C. Five million, three hundred two thousand and nine hundred eighty-five
D. Five million, three hundred two thousand, nine hundred eighty-five

3. How is 9,016,010 read?

A. Ninety million, sixteen thousand, ten
B. Nine hundred thousand, sixteen, ten
C. Nine million, sixteen thousand, ten
D. Nine million, ten thousand, six hundred ten

4. There are six hundred thirty-four thousand, two hundred twelve seats in the basketball stadium. How would you write this numeral?

A. 630,012
B. 634,012
C. 634,212
D. 634,221

5. Identify the place value for each digit in the number 3,425,167.

Digit	Place Value
1	_____
2	_____
3	_____

5 _____

6 _____

7 _____

6. What digit is in the hundred thousands place in the numeral 8,716,432?

A. 2
B. 4
C. 6
D. 7

7. What does the 2 represent in the numeral 7,320,975?

A. 2 hundreds
B. 2 thousands
C. 2 ten thousands
D. 2 hundred thousands

8. What is the numeral in standard form of the number four hundred four thousand, fourteen?

A. 400,400
B. 404,000
C. 404,014
D. 400,414

9. What is the expanded form for 7,357,021?

10. What is 9,000,000 + 400,000 + 60,000 + 7,000 + 500 + 8 in standard form?

11. What is 2,000,000 + 50,000 + 700 + 30 + 2 in standard form?

12. Which number sentence below is true?

A. 70,899 > 70,998
B. 132,401 = 132,104
C. 33,677 > 33,670
D. 24,908 > 24,980

13. Put a number in the space to make the statement below true.

4,236,017 > 4,23___,017

14. Which of the following makes the statement below true?

_____ < 6,111,089

A. 6,111,890
B. 6,111,098
C. 6,111,008
D. 6,325,490

15. What is 432 rounded to the nearest hundreds? (Remember to underline the place and look to the right to decide!)

16. What is 3,763,024 rounded to the nearest ten thousand?

ato 5 780,000 sour patch kids over the weekend. What is 5,780,000

18. Which numbers below can be rounded to 7,000?

7,472   6,602   7,701   7,908   6,804