Name _HW 9/6 Key_

Vocabulary

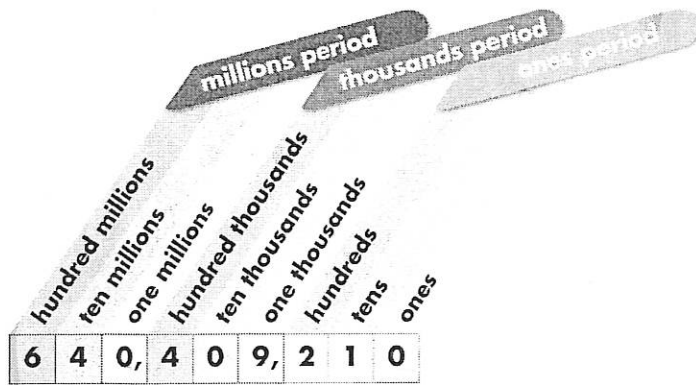|									
6	4	0,	4	0	9,	2	1	0

The **number name** for this number is six hundred forty million, four hundred nine thousand, two hundred ten.

1. **Expanded form** is a way to write a number as the sum of each digit multiplied by its place value. Fill in the blanks to write the number in expanded form.

   $6 \times$ _100,000,000_ $+ 4 \times$ _40,000,000_ $+ 4 \times$

   _400,000_ $+ 9 \times$ _9,000_ $+ 2 \times$ _100_ $+ 1 \times$ _10_

2. Use your work in Exercise 1 to write the number in expanded form using powers of 10 with exponents.

   $6 \times 10^{8} + 4 \times 10^{7} + 4 \times 10^{5} + 9 \times 10^{3} +$

   $2 \times 10^{2} + 1 \times 10^{1}$

3. Write the **value** of the underlined digit in 42,9<u>8</u>0,005. _900,000_

4. What is the relationship between the value of the two 5s in 1,550,304?

   The first 5 is in the hundred thousands place, so the value is _500,000_.

   The second 5 is in the ten thousands place, so the value is _50,000_.

   How many times as great as the value of the first 5 is the value of the second 5?

   10 times greater

On the Back!

5. Write 4,007,603 in expanded form using powers of 10 with exponents.

   $(4 \times 10^{6}) + (7 \times 10^{3}) + (6 \times 10^{2})$
   $+ (3 \times 10^{0}) \leftarrow$ Same as (3×1)

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