PLACE VALUE STUDY GUIDE

PLACE:

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Example: In what place is the underlined digit?

4̲02,978 = hundred thousands

38̲,419 = thousands

91̲ = ones

VALUE:

How to find the value of a number:

1) Bring the specified digit down.
2) All of the numbers ***after*** the specified digit turn into a 0.
3) All of the numbers ***before*** the specified digit disappear!

Example: Find the value of the 8 in 348,256.

348̲,256
↓
8,000

3 NUMBER FORMS:

Standard Form: 914,567

Expanded Form: 900,000 + 10,000 + 4,000 + 500 + 60 + 7

Word Form: nine hundred fourteen thousand five hundred sixty-seven

WRITING EXPANDED FORM:

How to write a number in expanded form:

1) Count how many digits are in your standard number.
2) Draw the same number of lines as digits below.
3) Bring the numbers down on the beginning of each line.
4) Add a zero for all the digits that come after the specified digit in the standard number.

Example: Write 289,153 in expanded form.

Step 1: Count the digits. **(6 digits)**
Step 2: Draw the same number of lines as the digits below **(6 lines)**

_____ + _____ + _____ + _____ + _____ + _____

Step 3: Bring the numbers down on the beginning of each line.

2_____ + **8**_____ + **9**_____ + **1**_____ + **5**_____ + **3**_____

Step 4: Add a zero for all the digits that come after the specified digit in the standard number.

200,000 + 80,000 + 9,000 + 100 + 50 + 3

WRITING STANDARD FORM FROM EXPANDED FORM:

How to write a number in standard form from expanded form:

1) Count how many digits are in the biggest number.
2) Draw the same number of lines as digits below.
3) Count over to each place in the numbers and fill in accordingly.
4) Fill in a zero for any empty spaces.

Example: Write 70,000 + 8,000 + 400 + 9 in standard form.

Step 1: Count how many digits are in the biggest number **(5 digits in 70,000)**
Step 2: Draw the same number of lines as the digits below **(5 lines)**

__ __ , __ __ __

Step 3: Count over to each place in the numbers and fill in accordingly.

7 8 , 4 __ 9

Step 4: Fill in a zero for any empty spaces.

7 8 , 4 0 9

78,409

CREATING A NUMBER WITH PLACES:

How to write a number with places:

1) Draw your 6 spaces.
2) Then fill in the numbers to the correct places.
3) Fill the empty spaces with zeros to get your answer.

Example: Which number has 4 hundred thousands, 7 thousands, 9 tens, and 6 ones?

Step 1: Draw your six spaces.

__ __ __ , __ __ __

Step 2: Then fill in the numbers to the correct places.

4 __ 7 , __ 9 6

Step 3: Fill the empty spaces with zeros to get your answer.

4 0 7 , 0 9 6

407,096

WORD FORM:

How to write a number in word form:

1) Circle the word **thousand**.
2) Underline the numbers before the thousand and underline the numbers after the thousand.
3) Write the numbers before the thousand.
4) Replace the word **thousand** with a comma (,).
5) Write the numbers after the thousand.

Example: How do you write two hundred ninety-three thousand four hundred fifty-seven?

Step 1: Circle the word thousand.

two hundred ninety-three thousand four hundred fifty-seven

Step 2: Underline the numbers before the thousand and underline the numbers after the thousand.

two hundred ninety-three thousand four hundred fifty-seven

Step 3: Write the numbers before the thousand.

293

Step 4: Replace the word thousand with a comma (,)

293,

Step 5: Write the numbers after the thousand.

293,457