

Teaching Notes For Homework #1

Number Groups

- Natural Numbers- what you observe in nature. Used for counting rocks and trees, etc. so they are also called “counting numbers”
 - 1, 2, 3... goes on forever; **does NOT include 0**
- Whole Numbers- all the natural numbers in addition to zero
 - 0, 1, 2, 3... goes on forever; **does NOT include fractions or decimals**

Place Value

- How to read a number
 1. Put in commas, every three numbers starting on the right
 2. Name the places

Whole Number Groups

Trillions				Billions				Millions				Thousands				Units			
Hundred trillions	Ten trillions	Trillions	Comma	Hundred billions	Ten billions	Billions	Comma	Hundred millions	Ten millions	Millions	Comma	Hundred thousands	Ten thousands	Thousands	Comma	Hundreds	Tens	Ones (units)	Decimal Point
		1	.	6	0	5	.	7	4	3	.	8	9	1	.	4	1	2	.

Do NOT say “and”, because “and” is only used when reading decimals!

Have students practice saying at least the following numbers. Practice more as needed.

- 891,009,732
- 8,379,621,203,812
- 29,107,931
- 4,203,000,384
- 1,000,001

Rounding

- How to round
 1. Draw an arrow above the number you are rounding to
 2. Draw another arrow pointing to the right towards the number you are looking at in order to decide how to round

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3. Round the number you pointed to in step 1 using the following rules:
 - a. If the number to the right is **less than 5**, then the number you are rounding to **stays the same** and everything after turns into zeros
 - b. If the number to the right is **5 or higher**, then the number you are rounding to **gets rounded up by one number** and everything after turns into zeros

Practice rounding problems *Also, have students practice saying the numbers to enforce place value.

- Round 3,897,358,427 to the millions place.
- Round 897,356,791 to the ten thousands place.
- Round 3,899,999,099 to the thousands place.
- Round 3,899,999,099 to the ten thousands place.
 - Note to students the difference
- Round 88,099,995,999 to the thousands place.

Adding and subtracting problems (aka number line problems)

Have students walk on a number line when adding and subtracting positive and negative numbers. A plus sign (+) simply means to move to the right and a minus sign (-) means to move left. You always start at zero and then follow the signs.

Practice number line problems:

- $-3 - 2 + 1$
- $-2 - 5 - 1 + 3$
- $8 + 7 - 4 - 2 + 9 - 2 - 1 + 5 - 6$

Large adding problems

Make sure students know to line up numbers and to carry when needed

Practice Problems:

- $3,879 + 6,219$
- $5,647 + 846 + 7 + 846,582$
- $273,421 + 84 + 846,008,364 + 2,846$

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