4th & 5th Grade Math with Math Dad and Science Mom

Place Value and Whole Numbers

Objectives: 4.NBT.A.1, 4.NBT.A.2

Place Value, Saying a number out loud. Multiplying and dividing by 10. Decompose it into parts.

Warm-up Problem: Use the numbers below to make the number **12** by combining them with appropriate mathematical symbols. You can rearrange them in any way you want, but be sure to use all 4 numbers.

4, 4, 8, 6

1. How do we say the number 5,288,917,843,335,881?

2. How do we say the number 83,243,765,432?

3. How do we say the number 626,490,000,156,712,154?

4. Decompose the number 3,576 into a sum of parts.

5. Decompose the number 104,329 into a sum of parts.

6. Multiply the number 457 by 10.

7. Divide the number 2,440 by 10.

Recap Problems:

1. How do we say the number 62,305,956,411,042,333?

2. Decompose the number 36,871 into a sum of parts.

3. Multiply the number 5,892 by 10.

4. Divide the number 657,360 by 10.

1. How do we say the number 56,702,055,128?

2. How do we say the number 909,611,142,890,304?

3. How do we say the number 78,800,000,000,361,000?

4. Decompose the number 3,732 into a sum of parts.

5. Decompose the number 3,141,592 into a sum of parts.

6. Decompose the number 6,391,045 into a sum of parts.

7. Which digit of 845,219 is in the 10-thousands place?

8. Which digit of 83,390 is in the hundreds place?

9. Which digit of 468 is in the tens place?

Challenge Problem: How do we say the number 12,345,678,909,099,876,543,210

Rounding and Comparing Whole Numbers

Objectives: 4.NBT.A.2, 4.NBT.A.3

Comparing whole numbers and rounding whole numbers.

Warm-up Problem: Use the numbers below to make the number **10** by combining them with appropriate mathematical symbols. You can rearrange them in any way you want, but be sure to use all 4 numbers.

3, 5, 2, 2

1. Round each number below to the nearest 10, 100, 1,000, and 100,000.

Round to the nearest	10	100	1,000	100,000
77				
123				
30,219				
4,444				
524,288				
12,345,678				

2. Compare each pair of numbers below by supplying the correct sign (<, >, or =).

344 ____ 433
12,388 ____ 12,299
3,213 ____ 6,512
812,773 ____ 812,601
524,288,378 ____ 524,239,217
12,345,678 ____ 9,266,404

3. Round to the nearest 10: 34,468
4. Round to the nearest 10,000: 678,325
5. Round to the nearest 10,000: 45,613,043
6. Round to the nearest 100: 57,692
7. Round to the nearest 1,000,000: 484,352,221
8. Compare each pair of numbers below by supplying the correct sign (<, >, or =).

64 ____ 46
1,338 ____ 1,338
7,658 ____ 6,442
810,453 ____ 810,621
5,324,378 ____ 5,315,217
127,888,345,678 ____ 127,889,266,404

1. Round each number below to the nearest 10, 100, 10,000, and 1,000,000.

Round to the nearest	10	100	10,000	1,000,000
655				
19,047				
666,392				
8,777,777				
909,445,534				
87,878,787				

2. Compare each pair of numbers below by supplying the correct sign (<, >, or =).

545 ____ 611

32,355 ____ 32,349

183,213 ____ 187,902

43,773 ____ 43,773

668,378,321 ____ 668,374,689

839,938 ____ 389,892,121

16,121,456 ____ 16,121,546

34,678,318 ____ 43,890,405

3. Round to the nearest 100: 35,642

4. Round to the nearest 10,000: 127,313

5. Round to the nearest 1,000: 57,612,021

6. Round to the nearest 100: 89,512

7. Round to the nearest 1,000,000: 834,705,252

Challenge Problem: What am I?

- I am a 3 digit number.
- When rounding to the nearest 10, I round to 540.
- If you add 6 to me and then round to the nearest 100, you get 600.

Adding and Subtracting Whole Numbers

Objectives: 4.NBT.B.4

Adding and subtracting whole numbers. The usual algorithms.

Warm-up Problem: Use the numbers below to make the number 4 by combining them with appropriate mathematical symbols. You can rearrange them in any way you want, but be sure to use all 4 numbers.

4, 6, 7, 2

1. $418 + 225$

2. $46{,}813 + 95{,}493$

3. $999{,}999 + 51{,}678$

4. $86 - 48$

5. $6{,}444 - 5{,}555$

6. $942{,}393 - 51{,}678$

7. $62{,}816 - 26{,}444$

8. $62{,}816 + 26{,}444$

1. 9,493 - 1,568

2. 97,903 + 13,745

3. 869,493 - 22,157

4. 869,493 + 22,157

5. 900,903 - 132,987

6. 981,440 + 363,464

7. 74,643,122 + 36,091,464

8. 74,643,122 - 36,091,464

Challenge Problem: Use the digits, 3, 3, 3, 3, 4, 4, 4, 4 to make two 4-digit numbers whose difference is 990. (When you subtract the smaller from the larger, you get 990.)

____ - ____ = 990