

Dear Families,

Our second math unit will be on place value, and many of the lessons will be based on an EngageNY module. Don't forget to visit the 4th Grade Math Site for more resources!

### **Standards Covered**

★[CCSS.MATH.CONTENT.4.NBT.A.1](#)

Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that  $700 \div 70 = 10$  by applying concepts of place value and division.*

★[CCSS.MATH.CONTENT.4.NBT.A.2](#)

Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

★[CCSS.MATH.CONTENT.4.NBT.A.3](#)

Use place value understanding to round multi-digit whole numbers to any place.

### **New Vocabulary** (see 4th Grade Math website for definitions)

- ★Place Value
- ★Digit
- ★Expanded Form
- ★Standard Form
- ★Word Form
- ★Round
- ★Number Line

### **Example Problems**

1. 10 times as many as \_\_\_\_\_ tens is 30 tens or \_\_\_\_\_ hundreds.
2. Sarah is 9 years old. Sarah's grandfather is 90 years old. Sarah's grandfather is how many times as old as Sarah?
3.  $4 \text{ thousands} + 11 \text{ hundreds} =$  \_\_\_\_\_
4. A large grocery store received an order of 2 thousand apples. A neighboring school received an order of 20 boxes of apples with 100 apples in each. Use disks or numbers on a place value chart to compare the number of apples received by the school and the number of apples received by the grocery store.
5. Arrange these numbers from greatest to least: 728,000; 708,200; 720,800; 87,300
6. Round 16,401 to the nearest thousand.

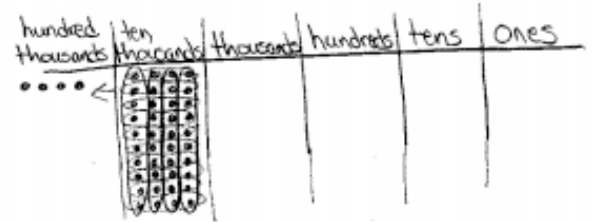
**Key Methods** (see 4th Grade Math website for more info)

★Multiplying and Dividing by Powers of 10

**Problem 2**

Multiply multiple copies of one unit by 10 (e.g.,  $10 \times 4$  ten thousands).

- T: Draw number disks and write a multiplication sentence to show the value of 10 times 4 ten thousands.
- T: 10 times 4 ten thousands is?
- S: 40 ten thousands.  $\rightarrow$  4 hundred thousands.
- T: Explain to your partner how you know this equation is true.



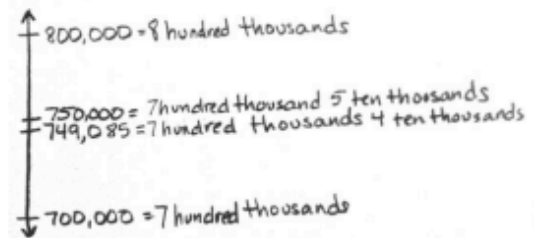
$$10 \times 4 \text{ ten thousands} = 40 \text{ ten thousands} = 4 \text{ hundred thousands}$$

Repeat with  $10 \times 3$  hundred thousands.

★Rounding using a Vertical Number Line:

Use a vertical number line to round a six-digit number to the nearest hundred thousand.

- T: (Draw a number line to round 749,085 to the nearest hundred thousand.) How many hundred thousands are in 749,085?
- S: 7 hundred thousands.
- T: What's 1 more hundred thousand?
- S: 8 hundred thousand.
- T: Label your endpoints on the number line. What is halfway between 7 hundred thousand and 8 hundred thousand?
- S: 7 hundred thousand 5 ten thousands.  $\rightarrow$  750,000.
- T: Designate the midpoint on the number line. With your partner, mark 749,085 on the number line and round it to the nearest hundred thousand.
- S: 749,085 is nearer to 7 hundred thousands.  $\rightarrow$  749,085 is nearest to 700,000.  $\rightarrow$  749,085 rounded to the nearest hundred thousand is 700,000.



Repeat with 908,899 rounded to the nearest hundred thousand.

Please contact us if you have any questions,

The District 90 4th Grade Team