MATH NEWS

Second Grade Newsletter — Summer/Fall 2019

Math Tips for Families — Unit 2: Extending Place Value

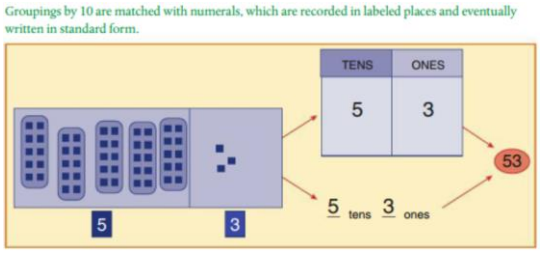
Unit 2: Extending our Understanding of our Base Ten System and Place Value

In second grade, students continue to develop a deep understanding of place value up to 1,000 with a concerted focus on 1s, 10s, and 100s. They will become adept at reading and writing numbers using base-ten numerals (537), number names (five hundred, thirty-seven) , and expanded form (500+30+7).

They will be dealing with values up through 1,000 and will skip count by 5's, 10's, and 100's. And ultimately, they will also compare three-digit numbers .

What came before ~ Foundation Skills

In first grade, students developed the concept of place value by viewing 10 ones as a unit and 2 digit numbers as amounts of tens and ones. They also counted tens and by tens (10, 20, 30, 40, 50, etc.) up to 100.



Key Terms

Place Value:

4 is less than 5

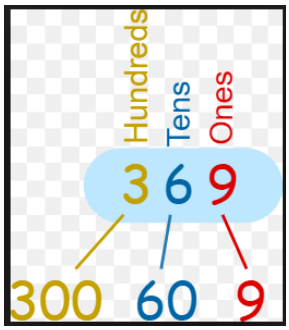
4 < 5

10 is greater than 8

10 > 8

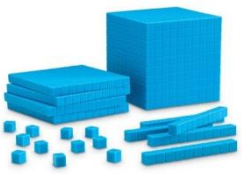
15 is the same as 15

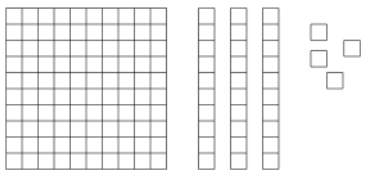
15 = 15



Base Ten Blocks

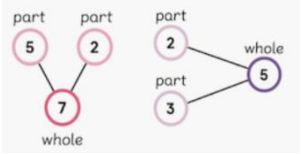
Representing 134





Number Bond

Also known as a part-part-whole diagram



Using Questions

- ✓ What do you notice?
- ✓ How many ones, tens, and hundreds are in this number?
- ✓ What is the value of the digit in the tens place ? (In 63, it means 6 tens or 60)
- ✓ How many dimes are in 63¢ ?
- ✓ How many pennies are in 63¢ ?
- ✓ How can we decompose or break apart this number?
- ✓ Look at two different numbers together and ask how do they compare with each other:
  - Are they the same?
  - Which is more (or less) than the other?
- ✓ Which is more, 2 dimes and a quarter or 4 dimes?
- ✓ Which would you rather have 25¢ or 4 nickels? Why?

How You Can Help

- Have students skip count using pennies, nickels, and dimes.
- Ask riddles:
  - I have 4 tens and 13 ones. Who am I?
  - I have 30 ones and 3 hundreds. Who am I?
  - I am 45. If I have 25 ones, how many tens do I also have?
  - Name a number that is larger than 364.
  - Name a number between 457 and 373.
  - 63 equals 50 and how much more?

Calculator Challenge Counting

Children press any number on the calculator (for example 17), then + 10. They say the sum before they press =. Then they continue to add 10 mentally, challenging themselves to say the number before they press =. Challenge them to see how far they can go without making a mistake.

You could also adjust the numbers to start with a number less than ten (if needed) or greater, such as 98 or 327 if your child is ready.

A fun twist is starting with a larger number and subtracting ten at a time.

Key California Content Standards for this Unit

2. NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

2. NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases.

a 100 can be thought of as a bundle of ten tens — called a "hundred."
b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
2.NBT.2 Count within 1000; skip count by 5's, 10's and 100.

2. NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.

2. NBT.8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.

TUSD ~
Supporting community & family understanding

Sources Used in this Newsletter:
- California Mathematics Content Standards
- California Mathematics Framework
- Teaching Student Centered Mathematics K-2