

Unit 4 – Applying Base Ten Understanding

Georgia Math

Grade 2

Overview

In this unit, students will:

- ❖ Strengthen their use of addition and subtraction strategies
- ❖ Reviewing and using place value to help add and subtract multi-digit numbers
- ❖ Solve problems adding and subtracting money
- ❖ Create graphs and use the data to answer questions

Key Common Core Standards

- Mentally add and subtract multiples of 10 or 100
- Use place value understanding and properties of operations to add and subtract. Including multiple two-digit numbers and numbers within 1,000
- Explain why addition and subtraction strategies work
- Draw and use data from picture and bar graphs

Vocabulary

Students will be using the following words in this unit:

- **Bar Graph:** a graph that uses height or length of rectangles to compare data
- **Picture Graph:** a graph that uses pictures or symbols to compare data
- **Difference:** the total when numbers are subtracted
- **Equation:** a number sentence with an equal sign. Ex. $17 - 9 = 8$
- **Estimate:** a number close to the exact amount
- **Quantity:** an exact amount or measure
- **Strategy:** a plan or way to solve a problem



Building the number 234 with place value cards showing the following:

$$2 = 2 \text{ hundreds} = 200$$

$$3 = 3 \text{ tens} = 30$$

$$4 = 4 \text{ ones} = 4$$

$$\text{So } 234 = 200 + 30 + 4!$$

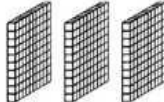
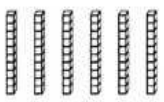
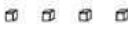
The Importance of Place Value

We have already done place value this year, why do it again?

Your student will continue to use place value throughout their school years and beyond. It is only explicitly taught in the lower elementary grades so we need to make sure students are secure in understanding and using the place value system.

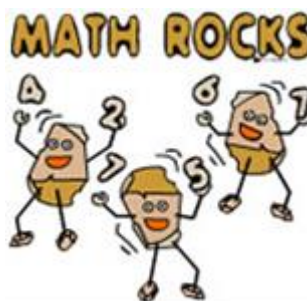
The use of manipulatives such as, counters and base-ten blocks helps students develop their own understanding of place value. It is important that students have several opportunities to practice using the base-ten system.

Recognizing that numbers can be broken apart, rearranged, and reformed, gives students a better understanding of how addition, subtraction, multiplication, and division work. This is especially true when students have a solid understanding of what each part of a whole number represents.

Hundreds	Tens	Ones
3	6	4
		

How You Can Help At Home

- Continue to ask how many ones, tens, and hundreds are in numbers that you and your student come across
- When possible, encourage your student to explain their mathematical thinking by drawing a diagram or picture that links to their addition and subtraction problems
- Continue to practice basic addition and subtraction facts to increase their fact fluency



Properties of Operations

Associative Property

Changing the grouping of three or more addends does not change the sum.

$$(3+2) + 5 = 3 + (2 + 5)$$

Commutative Property

Changing the order of the addends does not change the sum

$$3 + 2 = 2 + 3$$