

Math News

2nd Grade Unit 1: Counting, Coins and Combinations

<u>Issue # 1 of 5 - 1st 9 Weeks</u>

Our Learning Goals:

- Become fluent with addition combinations with sums up to 20
- Determine the value of a collection of coins
- Compose and decompose numbers up to 100 in more than one way
- Read and write time on a digital and analog clock to the nearest hour

Determining a Collection of Coins

In first grade students were expected to identify coins, write the value of a coin with a cent symbol and describe the relationships between coins (2 nickels have the same value as a dime).

In second grade, students will begin to write the value of a collection of coins using the cent symbol, dollar sign and the decimal point.

Related Activities to Try at Home:

- When you empty the change from your pocket, ask your child to name the coins and the value of each coin. Lastly, count the coins and write the total.
- Ask your child questions such as, "Can you find a quarter?" "How many pennies is a quarter worth?" "How much money do I have if I have three quarters?" "I need 43 cents, which coins could I use?"

Compose and Decompose Numbers

Composing and decomposing numbers are the foundation for understanding mathematics because it builds on our place value system and algebraic thinking. Our Texas standards require that students develop a "robust sense of numbers" by being able to break numbers down into their parts and put them back together in ways that make sense for the problem they are solving. See the "Why is this Important?" section of the Fact Fluency, box for examples of decomposing.

How will my child be Assessed?

Students will be assessed informally and formally throughout the unit with opportunities to learn from their peers and their own mistakes. An assessment will be given at the end of the unit. Students will be expected to record their thinking as well as their answer.

Fact Fluency

In this first unit, students will be working to become fluent with the three following sets of combinations:

- Make 10: All of the combinations of 10 make with two numbers (8+2, 3+7, etc...)
- Plus 1 Combinations: Any number plus one (5+1, 1+8, etc...)
- Plus 2 Combinations: Any number plus two (3+2, 2+7, etc...)

Students will work to master other sets of combinations in later units. To learn these combinations, we will be frequently working with these combinations in a variety of experiences such as games and problem solving. To become fluent, students must be able to recall these facts without counting on their fingers.

Why is this Important?

A successful mathematician looks for relationships between numbers to solve problems. These basic fact strategies will be used throughout the year as relationships to help students solve other problems. For example, students might use the following relationships to solve a problem such as 8+5:

- "8+5 is the same as 8+2+3. I know that 8+2 is 10 so add 3 more to get 13."
- "8+5 is the same as 3+5+5. I know 5+5 is 10 and 10+3 is 13."

Read and Write Time

In first grade students were expected to tell time to the hour and half hour using digital and analog clocks.

In second grade, students will extend their learning about time to include reading and writing the time to the nearest minute on digital and analog clocks. They will also learn to distinguish between a.m. and p.m. times.

Related Activities to Try at Home:

- Point out both digital and analog clocks in your home.
- Discuss your daily schedule with your child.
- Ask your child questions such as, "Do we eat dinner in the a.m. or p.m.?" "Can you tell me what time it is?" "Is it closer to 5:00 or 6:00? How do you know?"