

Our Learning Goals:

- Relationships can be found among different combination to 20.
- Using a known fact can help to reason about other combinations to 10.
- Visualizing, retelling, and modeling are strategies to find solutions to addition and subtraction situations.

Students can see patterns when finding combinations to 10.

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

$$4 + 6 = 10$$

$$5 + 5 = 10$$

Relationships can be seen when we use these combinations in context with a story problem.

Max had 3 library books. He returned to the library and checked out more books. If Max now has 10 books at home, how many more did he check out from the library?

What is happening in this problem? Does Max have more books at the beginning or at the end of the problem? Focusing on the action of the story problem will help the student know which operation to choose to solve the problem.

How Can I Help My Student?

In first grade, students are expected to develop efficient computation strategies for addition combinations from $1 + 1$ to $10 + 10$. Fluency means that combinations are quickly accessible mentally, either because they are immediately known or because the calculation that is used is so effortless as to be essentially automatic (in the way that some adults quickly figure out one combination from another. For example, thinking $8 + 9 = 8 + 10 - 1$).

The addition problems from $1 + 1$ to $10 + 10$ are traditionally referred to as “addition facts”. In addition, the word fact implies that something cannot be learned through reasoning. However, the sum of $7 + 8$ can be determined in many ways. For example, if we know that $7 + 7 = 14$, then we can add 1 more to get 15. If we know that $8 + 8 = 16$, we can take away 1 and get 15.

In other words, listen to your student’s thinking about the numbers and number combinations. If they know an efficient strategy to learn their “facts”, they will be successful.

What Activities Can I Do At Home?

Tens Go Fish

Using an ordinary set of cards with all face cards removed, you can play this game. Deal out 5 cards to each player. Leave the rest in a pile. If you can make 10 with 2 of the cards in your hand, put those cards aside and draw 2 more. Then take turns asking each other for a card. We will also be playing this game in school so your child may be able to teach you!

Math Literature

You can find the following books in your local library and read them together.

Bogart, Jo Ellen. Ten for Dinner

Carle, Eric. Rooster’s Off to See the World

Crews, Donald. Ten Black Dots

Duke, Kate. Twenty is Too Many

Falwell, Cathryn. Feast for Ten

Jonas, Ann. Splash

Murphy, Stuart J. Animals on Board.

Tang, Greg. Math Appeal

Ongoing Learning

Students in first grade should continue to have lots of opportunities to **use objects** to compose different ways to make **10**. Students are expected to apply basic fact strategies to add and subtract **within 20 by the end of the year**. This should not be a flash card activity.

How Will My Child be Assessed?

Students will be assessed informally and formally throughout the unit through teacher observation and one-on-one interviews. They will be asked to explain how they are thinking about the math concepts they are learning.