Grade 2

Unit 3: Addition, Subtraction, and the Number System

About this Unit

In this second number unit, students solve problems with multiple addends and consider whether order matters in addition. For example, does 7 + 4 + 3 + 6 = 7 +3 + 4 + 6? Students revisit addition and subtraction story problems, investigate even and odd numbers, and begin to make sense of counting by groups and place value (tens and ones). Work on addition combinations continues as students achieve fluency with the near doubles.

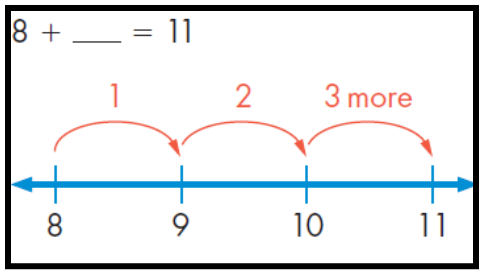
TEAMBCPS
Office of Mathematics PreK-12

The PreK-12 Mathematics curriculum focuses on problem solving, communication, and critical thinking in order to provide a foundation where every student reaches their potential to become a globally competitive, mathematically literate citizen.

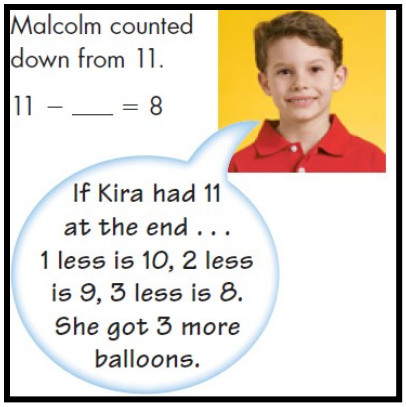
Story Problems and Addition and Subtraction Strategies

Students continue to work on making sense of the action of different types of addition and subtraction problems. They continue to develop efficient strategies for solving problems and are introduced to problems with unknown change. Below is an example of a problem with an unknown change.

Katrina had 8 balloons. Then she got some more. When she recounted, she had 11 balloons. How many did she get?



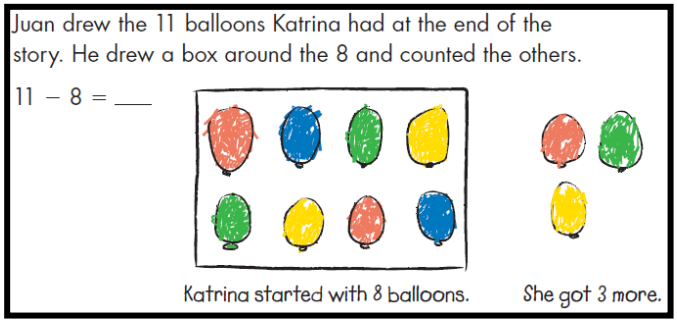
Some students may use a number line to count up from 8 until they get to 11. They are using the "think addition" strategy to solve the problem.



Some students may count back from 11.

Story Problem Routine and Addition and Subtraction Strategies (continued)

Katrina had 8 balloons. Then she got some more. When she recounted, she had 11 balloons. How many did she get?



Other students may draw a picture to show how they solved the problem.

Even and Odd Numbers

Students investigate what makes numbers odd and even using the context of partners and teams. They discover that even numbers are those that make two equal teams, or groups of two, with no one left over.

An even number of people can be put into pairs, with no one leftover. An even number of people can make 2 equal teams.

10 people make 5 groups of 2 (partners).

10 people make 2 groups of 5 (teams).

10 is an even number.

An odd number of people cannot be put into pairs with no one leftover. There is always one person leftover. An odd number of people cannot make 2 equal teams. One team always has one more.

7 people make 3 groups of 2 (partners) with 1 person left over.

7 people cannot make 2 equal teams.

7 is an odd number.

Helping Your Child at Home

- Add all the digits of your house number together.
- Skip count when counting groups of nickels, dimes, and quarters.
- Count in a pattern, for example by 2s, while doing a rhythmic or repeated task- jumping rope, walking, washing hands.
- Give your child an addition or subtraction number sentence and ask them to make up a story problem to go with the number sentence.
- Choose a number that you will call the "Number of the Day." Ask your child to think of different ways to make the number of the day, using equations.
- Show your child a grocery store coupon for a product that he likes to eat. Have him count out coins to show how much money the coupon saves on the product.
- Present problems to your child that encourage the use of counting by ten. For example, "If potatoes cost 10 cents per pound what is the total cost of 6 pounds of potatoes?"

Visit These Websites for Interactive Math Activities

- Connect Sums (http://www.carstensstudios.com/mathdoodles/connectsums.html)
  Students click on a series of values that add up to a target sum.

- Sums Stacker (http://www.carstensstudios.com/mathdoodles/sumsstacker.html)
  Students click and drag values until they reach the target sum.

- Count Hoot's Number Games (http://www.bbc.co.uk/schools/laac/numbers/ch1.shtml)
  Students solve a variety of addition and/or subtraction problems.

- Connect Sums: Coins (http://www.carstensstudios.com/mathdoodles/connectsums.html)
  Click on the picture of the coin on the homepage. Students click on a series of values that add up to a target sum.