

Further investigations:

Fist full of Cereal! Give your child a small handful of multicolored cereal loops. Help him sort and organize the different colored cereal. Let him first represent each color with a tally mark to show the amounts of each color. Next, have him use the tallies to create a picture graph showing the different amounts (quantity) of the colored cereal. Last, have your child represent the same information (data) as a bar graph. Ask your child: Which color of cereal occurs the most in your sample? Which color occurs the least? Compare the amount of green cereal with the amount of red cereal; use greater than, less than or equal to. Repeat with the other colors. Which color(s) of cereal have less than/more than the orange?

Terminology:

Demonstrate: to clearly show evidence of understanding

Value: a numerical quantity, an amount

Equivalent: equal in value

Quantity: an amount that can be counted or measured

Represent: to draw or build a model that stands for or symbolizes a mathematical relationship

Count on: to continue counting in sequence from a given number

Equal to: quantities that have the same mathematical understanding

Less than: a mathematical relationship where one value is smaller than another

Greater than: a mathematical relationship where one value is larger than another

Tally mark: a mark used in keeping track of acts or objects. The marks consist of four vertical lines bundled diagonally or horizontally by a fifth line.

T-Chart: a two-column chart that organizes information

Picture graphs: a graph using pictures to represent quantities

Bar graph: a graph using bars to represent quantities

Data: a collection of information that may include facts, numbers, or measurements

Order: arrangement according to size, amount, or value

Related Files:

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Routines and Data

First Grade 1 of 6

Students will:

- Represent a number by the appropriate numeral
- Use counters and pictures to represent numbers in terms of tens and ones
- Compare objects using greater than, less than, and equal to
- Understand number relationships by using strategies of counting on and counting back
- Pose questions, collect data, create graphs, and interpret graphs

Classroom Cases:

1. Dante's class took a vote to see if they would spend their recess time inside the classroom or outside on the playground. The result of the class vote are in the tally chart. Where did Dante's class spend their recess?

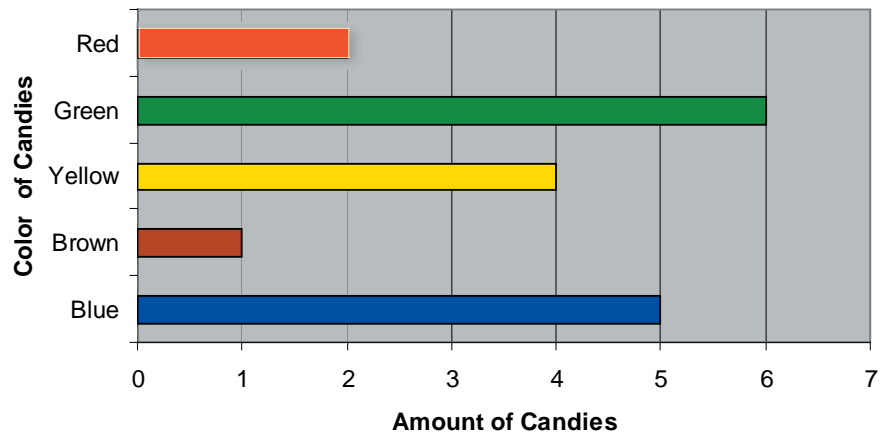
Inside	Outside

Case Closed - Evidence:

They spent recess outside.

2. The graph below indicates how many candies Kim has by color.

Kim's Colored Candies



- a. How many more green candies than brown candies does Kim have?
- b. Kim has fewer orange candies than yellow candies. How many orange candies could Kim have?
- c. Kim ate five candies and now only has three colors left. What two candy colors did Kim eat that left her with only three remaining colors?

Case Closed - Evidence:

- a. 5
- b. 3, 2, or 1
- c. Yellow and brown

Clues:

Children at this age will sometimes choose an answer based on the size of the item instead of the quantity. Spend extra time at home comparing items of different sizes and amounts. To help your student begin organizing his information use small items such as beans or cereal in an empty ice tray or egg carton. Each space can hold one item. Because containers are uniform, it is easy to see the different amounts represented.

Book 'em:

Minnies' Diner: A Multiplying Menu by Dayle Ann Dodds

Ask Mia by Iris Hudson

Grandma's Button Box and **Who's Got Spots** by Linda Williams Aber