

Further investigations:

As you are reading the newspaper or a magazine, point out various graphs and charts to your child and talk about how you make sense of them, what they mean, and why you're interested in them. This is an opportunity for you to show your child how graphs communicate important information to you and your family.

You will find that there are many opportunities to collect data around your home. Which color or make of car is the most common on your street? Do more households in your neighborhood have a dog or a cat? After a while, collecting and thinking about data may become a habit that you and your child share. Collect the data and present in a table and then a bar graph.

M&M Math: Open a small bag of M&M's. Create a table of M&M colors. Write the number of each color next to the word. Create a bar graph that shows the number of M&Ms of each color. Create a scale based on different intervals such as 2, 5, or 10. Ask your child questions that can be answered from the bar graph.

Terminology:

Bar graph: a way of displaying data using horizontal or vertical bars so that the height or length of the bar indicates its value

Scale: the numbers along the axes on a graph. The numbers are arranged in equal intervals.

Interval: a regular distance or space between values

Book'em:

Lemonade for Sale

by Stuart J. Murphy

Graph It! by Lisa Trumbauer

Tiger Math by Ann Whitehead Nagda

Graphs by Sara Pistoia

Graphing Activities by Joy Evans

Graphs by Bonnie Bader

Clues:

Students have worked with pictographs, Venn Diagrams, and bar graphs in previous grade levels. The scale increments on the bar graphs for third grade are 1, 2, 5, and 10. Using different increments is a new idea for third grade.

Related Files:

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Data Analysis

Students will:

- Collect, organize, and display data in tables and bar graphs
- Construct bar graphs using a variety of scales (increments of 1,2,5, and 10)
- Interpret data in bar graphs
- Solve problems by organizing and displaying data

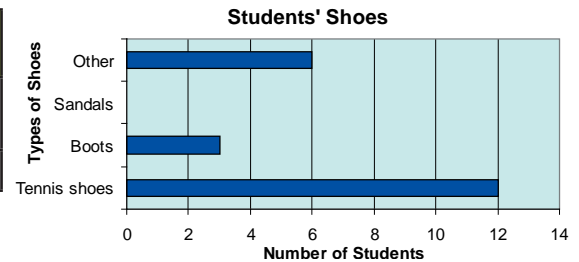
Third Grade 5 of 6

Classroom Cases:

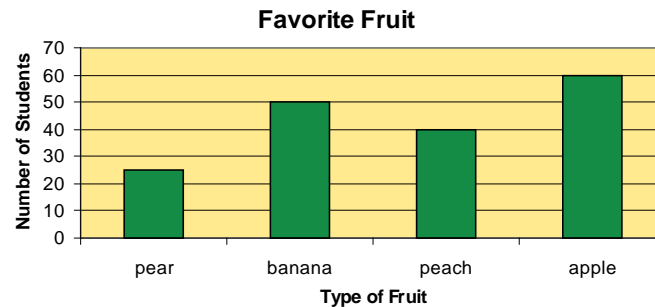
1. Find out what kind of shoes students have in the class. The choices are tennis shoes, boots, sandals, other. Make a table and bar graph to display this information

Case Closed - Evidence:

Tennis Shoes	Boots	Sandals	Other
12	3	0	6



2. Answer the following questions using the bar graph below.
 - a. How many more students like apples than pears?
 - b. Which fruit should be served more often in the school cafeteria and why?



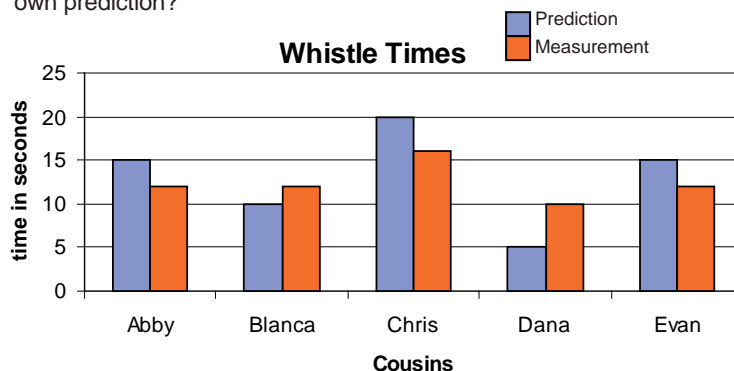
Case Closed - Evidence:

- a. $60 - 25 = 35$ students
- b. Apples they are the most popular fruit.

3. Uncle Bob asked his nephews and nieces who could whistle the longest on one breath. Each cousin predicted his time, and then Uncle Bob actually measured their whistle times. The results are in the table. Make a double bar graph and use it to answer the questions: Who had the longest whistle? Who was closest to his own prediction?

Cousin	Prediction	Measurement
Abby	15 sec	12 sec
Blanca	10 sec	12 sec
Chris	20 sec	16 sec
Dana	5 sec	10 sec
Evan	15 sec	12 sec

Case Closed - Evidence:



Chris has the longest whistle time; his bar is the tallest. Blanca made the closest prediction; her bars are the closest in height.