THE LONG AND SHORT OF NAMES

Make a histogram to compare name lengths in your class!

Do you know who would've had a hard time filling out his name on a standardized-test form? Adolph Blaine Charles David Earl Frederick Gerald Hubert Irvin John Kenneth Lloyd Martin Nero Oliver Paul Quincy Randolph Sherman Thomas Uncas Victor William Xerxes Yancy Zeus Wolfeschlegelsteinhausenbergerdorffvoralternwarengewissenhaftschaferswessenschafewarenwohlgepflegeundsorgfaltigkeitbeschutzenvonangreifendurchihrraubgierigfeindewelchevoralternzwolftausendjahresvorandieerscheinenwanderersteerdemenschderraumschiffgebrauchlichtalsseinursprungvonkraftgestartseinlangefahrthinzwischensternartigraumaufdersuchenachdiesternwelchegehabtbewohnbarplanetenkreisedrehensichundwohinderneurassevonverstandigmenschlichkeitkonntefortplanzenundsicherfreuenanlebenslanglichfreudeundruhemitnichteinfurchtvorangreifenvonandererintelligentgeschopfsvonhinzwischensternartigraum Senior. Mr. Wolfe (for short) was born in Germany in 1904. At 590 letters, his last name was in the *Guinness World Records* book as the longest anywhere!

Your name is *probably* a bit shorter than that. Still, you might be surprised at the range of name lengths in your class: some short, some long, and some in-between. What's a great way to compare them? Its name is 9 letters long: histogram!

—by Maureen Ker

HISTOGRAMS

A *histogram* is a type of bar graph in which each bar represents a specific *interval* of answers. (For example, if the data was the number of pizzas sold at a restaurant in a day, the different intervals could be: 1-10, 11-20, 21-30, etc.) Here's how to make a histogram:

✔ First, collect your *data*. For example, we asked 20 co-workers how many pairs of sneakers they own. Here are their answers (our data): 8, 3, 6, 3, 3, 1, 6, 3, 2, 0, 7, 2, 3, 4, 3, 6, 5, 6, 3, 7.

✔ Next, look at the *range* of your data. Our least answer was 0 and the greatest answer was 8.

✔ Divide that range into equal intervals. We picked intervals of 3 pairs of sneakers each: 0-2 pairs, 3-5 pairs, and 6-8 pairs. (Try not to have too many intervals.)

✔ Make a table, placing each piece of data into one of the intervals.

Pairs of Sneakers	Co-Workers
0-2	4
3-5	9
6-8	7

✔ Finally, use the table to draw the histogram:

PAIRS OF SNEAKERS OWNED BY OUR CO-WORKERS

Unlike bar graphs, histograms have no space between the bars.
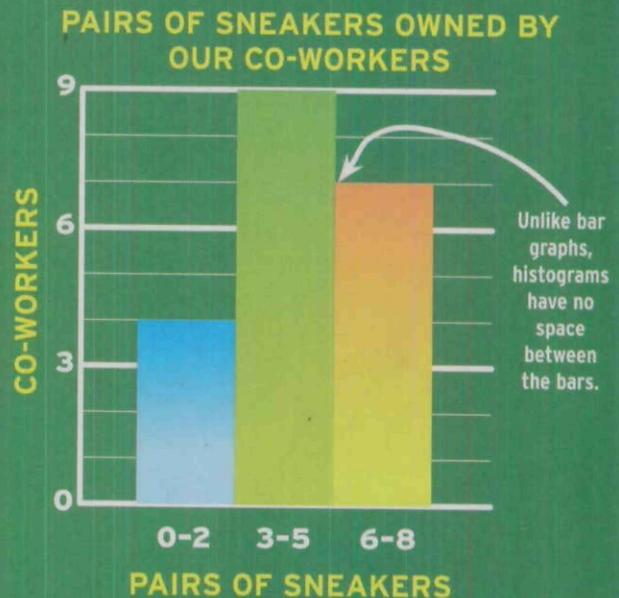
✔ Remember to give your histogram a title, and to label your horizontal and vertical axes.

WHAT TO DO

✔ Ask your classmates to count the total number of letters in their first, middle, and last names.

✔ Follow the directions above—using your class's data and the answers to questions 1 to 4—to make a histogram on a separate sheet of paper.

1 a. What is the least number of letters in your data?

b. What is the greatest number of letters in your data?

2 Look at the range from least to greatest. You'll want to divide that range into a number of equal intervals. (If the range doesn't divide evenly, you can expand it a little.) How many letters will be in each interval on your histogram?

3 How many bars do you need for your data?

4 Say you labeled the *x*-axis "Number of letters in name." What would you label the *y*-axis?

THINK ABOUT IT

Would the histogram look different if you used only first names?