

Data Collection for Bar Graphs (Central Tendency Unit)

This activity should be used after the students have a good understanding of bar graphs, and can put data given to them into a bar graph.

1. Divide students into groups of 2 – 3. Have one be the recorder, one the counter, and one manager. You can do car colors, car types, trees, birds, etc. (pretty much anything you can count and has some variety around your building).
2. Decide as a class what you will collect. Then set parameters if necessary (for example: If you are collecting car colors, decide on a set number of colors and where some ‘between’ colors belong). Escort the students outside to collect data.
3. Have students collect data, and then escort them back into the building. In their groups, they will organize the data into a bar graph. You will need to specify the order in which the labels appear on the x-axis so when the data is entered into Navigator, everyone’s is consistent (ex: black = 1, gold = 2, silver = 3, etc.).
4. In the activity center, set it up so the students can enter two lists. L_1 should contain the numbers 1 through (x) depending on how many colors/brands/types you collected, and L_2 should contain the corresponding number of items for each category. Also, set up the graph to show L_1 and L_2 along with an appropriate window.
5. Ask students to visualize a bar graph (masking tape may work to create the bars on the screen). Discuss why the “bars” may have a couple differing points (counting error). Draw conclusions from what you see: Which color/brand/type seems to be popular? Least popular? Why? Any trends?