

First – take the survey for Project 1 (no real names)

You may work with a partner on this project.

**Part 1: Statistics in the news.**

- Find a newspaper article that describes the distribution of a variable (look for a graph)
- On day 2, you will describe your article to the class. Describe the center and distribution.

**Part 2: Data from the class – Qualitative Data**

- Make a two-way table comparing the gender of the student to the gender of his/her favorite teacher.
- Find the marginal distributions.
- Make a side by side bar graph to compare the results for male and female students.

- Convert the table to a conditional distribution table.
- Make a stacked bar graph to compare the results for male and female students
- Answer the claim that a student's favorite teacher will be of the same gender. Use statistics.

### **Part 3: Mean as Balancing Point**

- Complete the activity on page 52 of the book
- Show it to the teacher so I can sign off.

### **Part 4: Population of Pierre**

- The class was survey on the population of Pierre. Half the class received one survey while the other half received an alternate survey.
- What was the point of the survey? Did it work? Prove it with statistics.

### **Part 5: Your Choice**

- Choose the data for one of the quantitative questions from the survey.
  - Minutes between when you got out of bed and when you left your house
  - Span of your hand in cm (distance from pinky to thumb, fully stretched out)
  - Choose a random number from 1 to 100
  - How many states have you visited?
- Create a histogram or dot plot of the data (you decide which is more appropriate)
- Create a box-plot under the histogram using the same scale.

- Describe the Distribution.
- Summarize the data and describe any conclusions that can be reached from the data.

**Homework during the Project: Study for the quiz using the AP Practice Test on pages 78-81**