AP Statistics Project

Group members:_____

Overview: You will formulate an appropriately framed statistical question, gather data from the Census at School database, create an appropriate visual display, and justify your conclusions from the data.

Steps:

1. Read the Census at School survey questions. Discuss with your group some possible statistical questions that can be answered with data from the survey. Keep in mind that students from grades 4-12 have taken the survey from many states (but possibly not all).

2. Write out 2 or 3 of your best questions and hand them in for approval.

3. Once a question is approved, decide the following for each group member: sample size, states, grade level(s), gender(s), year. EACH STUDENT MUST GATHER THEIR OWN RANDOM SAMPLE.

4. Now you're ready to collect your random samples. Go to www.amstat.org/censusatschool and select Random Sampler. Follow the directions to download your sample. It should download as a .csv file. This can easily be opened in Excel and/or copied to Fathom for further analysis.

5. Once you have your data, you must "clean" it for possible errors. Then you can create your visual displays, calculate relevant statistics and write your final report. Be sure your conclusion can be justified from the data you collected, and that your scope of inference is correct.

6. Write your final report in Word, print and turn in. Your report should have the following: Question clearly stated, relevant graph(s) and statistics, clearly written conclusion with justification from the data.

You will be graded on the following:

_____Interesting question was posed.

_____Relevant data was gathered.

_____Visual display of data: simple, accurate, appropriate; results are clear from graph.

_____Summary and conclusion: justification is based on data gathered.
Conclusion (answer to question) is clear, concise, correct, complete and in context. Also include 2–3 things you learned during the project (perhaps even things that went wrong that you would do differently next time).

Follow-up questions--answer after finishing the project.

1. What type of sampling method did you use for this project? Explain.

2. Was there a different sampling method that might have been better? Explain.

3. Describe the scope of your conclusion(s).

4. Were there any cause-and-effect conclusions that could be drawn from your results? Explain.

5. What was the most important thing you learned about collecting and analyzing Census At School data?