GASOLINE POWERED VEHICLE

Decide on the vehicle of your choice to purchase. You may not exceed $25,000 for gasoline and $30,000 for AFV. Use this as a self-check and/or a peer check. Attach magazine product with data.

Model_____ Make_____ Year_____ HP_____

Cylinders_____

Weight_____ Type of Fuel_____ Miles per Tank_____

Information	Check	Comments/Suggestions
Technology of the engine—include a visual		
Research on fuel development, including evidence of impact on the environment and visuals		
Research on the environmental impact of burning the fuel		
Research on the safety issues associated with the type of fuel source		
Emissions testing information, including the amount of carbon dioxide, carbon monoxide, and nitrogen oxide		
Research on the availability of the fuel source		
Chart of advantages and disadvantages of the fuel source (compiled AFVs chart)		
Total number of miles driven in a year; percent of miles driven in the city and on the highway—show all work		
Miles per gallon for both highway and city driving		
Total fuel costs for one year ($2.85 per gallon)		

Extra information (tax incentives might be another topic to check out with AFV)		
Rationale given for data analysis methods		

Circle the kinds of data analysis used and list one example of where it was used. You do not need to include all of them in your project. Decide which of the following is most appropriate for the data that you have researched:

- Correlation coefficients
- Curve of best fit
- Different types of charts (bar, pie)
- Histogram
- Line of best fit
- Linear regression
- Median, mode, and mean
- Predict patterns and trends
- Scatter plots
- Slope
- Whisker box plot

Give one example of each of the following types of data from your project:

- Bivariate
- Categorical (qualitative)
- Measurement (quantitative)
- Univariate
- Variables

Summary of Elective Research (attach data sheets):

Teacher Check and Comments: