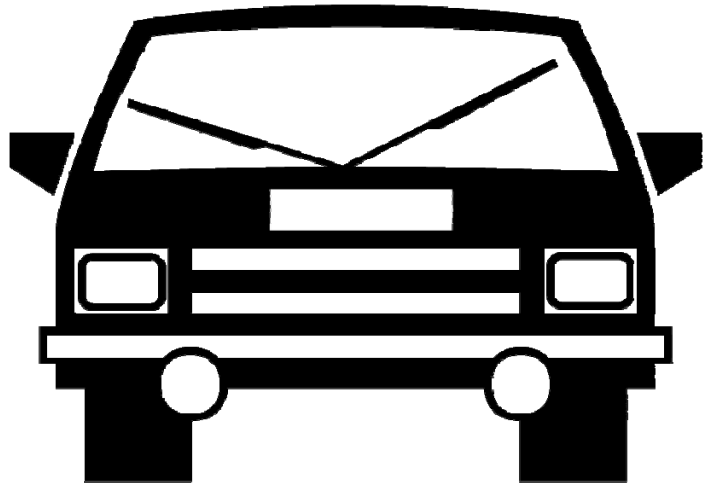
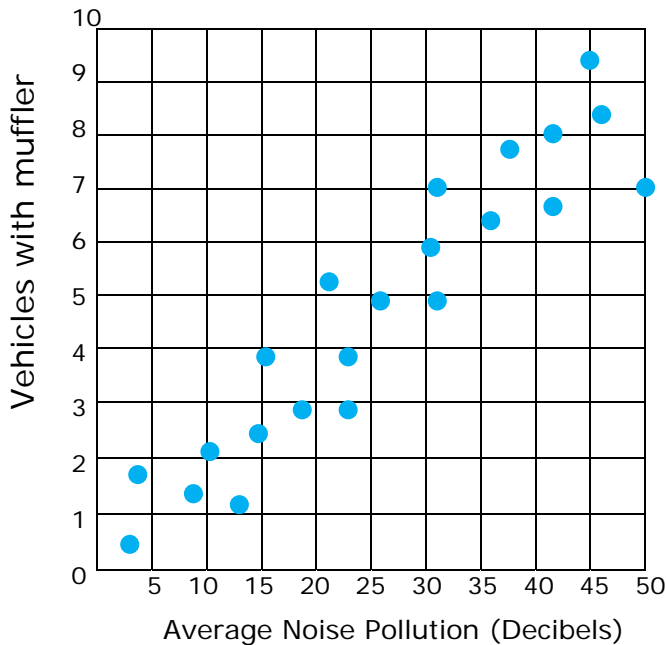


**Correlation vs. Causation Worksheet - Guided Lesson**

Complete the following problems:

A survey of 50 vehicles in each of 10 cities was taken to measure the average noise pollution and the percentage of vehicles with mufflers in their vehicles. The results are shown below.



1) The data represents which type of correlation?

- A. Positive                      B. Negative  
C. Weak                          D. Zero

2) Which statement can be concluded about the data?

- a. There is causation between the number of vehicles with mufflers and the average noise pollution.  
b. There is no correlation between the number of vehicles with mufflers and the average noise pollution.  
c. More noise pollution causes people to use more mufflers.  
d. There is a correlation but not necessarily causation between the number of vehicles with mufflers and the average noise pollution.



Name \_\_\_\_\_

Date \_\_\_\_\_

3) David noticed that more mufflers are used because of more noise pollution. This is incorrect for what reason?

- A. The data shows no correlation.
- B. The relationship could be related to outside factors, such as the cost of using mufflers.
- C. There is causation but no correlation between the variables.
- D. The graph shows that less noise pollution causes fewer mufflers to be used.

