Name: **Key**   Date: _____

Introduction to Statistics Review 1

1. Currently, there are 13,673 McDonald's restaurants in the US and another 1,471 restaurants outside of the US.
    a. Are the number of McDonald's restaurants discrete or continuous?

    Discrete

    b. What is the level of measurement for the numbers of McDonalds in different states (nominal, ordinal, interval, ratio)? Justify your answer.

    Answers may vary: *Nominal-if the students say they are organizing by state
    *Interval- if the students say they can organize by the number of restaurants

    c. If a survey is conducted by randomly selecting 10 customers in every McDonalds, what type of sampling is used?

    Randomly selected sample

    d. What is wrong with surveying customer satisfaction by mailing questionnaires to 10,000 randomly selected customers? Justify your answer.

    Student Responses might vary
    No Response- people might not complete the survey
    Missing Data- not everyone might have an address

2. Staff are parked in parking spots numbered 10, 14, 2, 23, 15, 26, 40, and 32.
    a. Does it make sense to calculate the average (mean) of these numbers?

    No

    b. Which of the following level of measurement best describes the data listed. (Nominal, Ordinal, Interval, Ratio). Justify your answer.
    Student Responses might vary
    *Nominal- Students may say the spot numbers are just labels
    *Ordinal- Students may say the data can be ordered

3. In a recent poll, pollsters randomly selected high school students and asked them whether they attend school regularly. 27% of students responded that they don't attend regularly.
    a. Would the 27% an example of a statistic or a parameter?
    Statistic. They did not survey every high school student.

    b. Students gave a yes or no answer, is the data qualitative or quantitative?   Qualitative