

THIS QUIZ IS PRACTICE ONLY, but do give your own honest best effort so I can look at the quizzes to help us start the year off right in the grades department.

1. Explain the differences between a population, a census, and a sample.
2. Explain the difference between a statistic and a parameter

Directions: Determine the word that best suits each statement

3. The color of your car is an example of which type of measurement  
(nominal, ordinal, interval, or ratio)
4. Which of the following data measurements MUST be categorical ?  
(nominal, ordinal, interval, or ratio)
5. Which of the following data measurements MUST be numeric ?  
(nominal, ordinal, interval, or ratio)
6. Which of the following data measurements MUST be numeric and have an initial starting value of 0, with measureable, proportional, and meaningful relationships between values?  
(nominal, ordinal, interval, or ratio)
7. The weight of your car is an example of which type of measurement  
(nominal, ordinal, interval, or ratio)
8. The year in which you were born ( I would accept two answers but one is better)  
(nominal, ordinal, interval, or ratio)
9. One car manufacturer's engine packages were listed as: economy; standard; and sports package.  
(nominal, ordinal, interval, or ratio)
10. Another car manufacturer's engine packages were listed as: V4; V6; and V8.  
( I would accept two answers but one is better)  
(nominal, ordinal, interval, or ratio)
11. You describe your trips as: two short flights with a lay-over; and a single long direct flight.  
These are examples of which type of measurement  
(nominal, ordinal, interval, or ratio)
12. The daily temperatures on the planet Mercury are examples of which type of measurement  
(nominal, ordinal, interval, or ratio)

13. You go to the store and purchase 12 apples in total: 9 green; and 3 red. The total weight of the apples was 5.6 pounds and it cost \$7.25.
- What are the qualitative portions of the above statement?
  - What are the quantitative portions of the above statement?
  - Which of the data could be considered discrete?
  - Which of the data could be considered continuous?
14. Mr. Elliott is trying to gauge the level of satisfaction of the staff and students with recent “round table discussions” Since it is difficult to poll everyone in the building, he decides to poll 20 teachers (5 from each grade level) and 100 students (25 from each grade level) randomly to see what they think of the new activity. 88% of polled teaching staff felt that they were satisfied with the first round table discussion. 90% of the polled students felt that they were satisfied with the first round table discussion.
- State the population in the above statement \_\_\_\_\_
  - State the parameter in the above statement \_\_\_\_\_
  - State the sample in the above statement \_\_\_\_\_
  - State the sample in the above statement \_\_\_\_\_

Directions: Use the following data sets to answer the following questions #15-17

Data Set 1: {2,2,4,9,9,13} Data Set 2 {3,3,4,4,5,5,8,8,8} Data Set 3 {8, 8, 9,9,9,10,10,}

- Determine each of the following for data list 1 Mode \_\_\_\_\_ Median \_\_\_\_\_ Mean \_\_\_\_\_
- Determine each of the following for data list 2 Mode \_\_\_\_\_ Median \_\_\_\_\_ Mean \_\_\_\_\_
- Determine each of the following for data list 3 Mode \_\_\_\_\_ Median \_\_\_\_\_ Mean \_\_\_\_\_
- Which data lists are positively skewed? \_\_\_\_\_
- Which data lists are negatively skewed? \_\_\_\_\_
- Which data lists are symmetric? \_\_\_\_\_

Directions: Use the following numbers in data list 4 {1,2,4,5,6,7,7,8,9,10} to answer the questions 21 and 22

- What number can you add to the data list 4 to get a mean of 8?
- Assuming that you start with the original data list 4, what number(s) can you add to the list to get a median of 8?