Quiz 1 Review

Individuals, Variables, Population, Samples, 4 Ways to Collect Data   Date:_____ Period:_____

Vocabulary—*Use your ISN to find the exact answer that fits each blank.*

1. A data value that represents or describes the population is called a _____.

2. _____ deliberately imposes some treatment on individuals in order to observe their responses

3. _____ Statistics involves organizing, summarizing, and displaying data

4. _____ is the science of collecting, organizing, and interpreting of data in order to make a decision.

5. The entire group of interest is called the _____.

6. _____ _____ observes individuals and measures variables of interest but does not attempt to influence the responses.

7. The part of the population that is studied and from which we collect actual information is called the _____.

8. A _____ variable consists of attributes, labels, or numbers with which mathematical operations do NOT make sense.

9. _____ _____ is a study that starts with an entire population and choose a sample to represent it.

10. A _____ is a numerical value gained from the data of a sample.

11. The objects, people, or animals described by a set of data are called _____.

12. _____ Statistics involves using sample data to draw conclusions about a population

13. A _____ variable consists of numerical counts with which mathematical operations make sense.

14. _____ is a sample survey that attempts to include the entire population in the sample.

Multiple Choice—*Circle your answers*

15. A recent study determined that every third person to enter the mall does not make a purchase. The results of this study are an example of what?
    - a. sample
    - b. parameter
    - c. statistic
    - d. population

16. A person's blood type would be an example of what type of variable?
    - a. descriptive
    - b. quantitative
    - c. categorical
    - d. homogeneous

17. A survey of 125 students was taken to determine what extracurricular activities should be offered at St. Louis High School. This survey is an example of what?
    - a. sample
    - b. parameter
    - c. statistic
    - d. population

18. A variable that can be placed into distinct categories according to some characteristic or attribute is called:
    - a. continuous
    - b. categorical
    - c. quantitative
    - d. homogeneous

19. The chimpanzees being studied by Jane Goodall would be an example of what?
    - a. categorical
    - b. quantitative
    - c. variable
    - d. individual

20. The number of absences per year that a worker has is an example of what type of data?
    - a. continuous
    - b. categorical
    - c. quantitative
    - d. random

21. The average salary of all the employees at considered a,
    - a. sample
    - b. parameter
    - c. statistic
    - d. population

Your school has 1000 students. You ask 80 of them, "Have you had a cold in the last three months?" Fifty-six percent of them answered "yes."

    36. This is an example of

        a.   an experiment.   c.   an observational study.

        b.   a census.   d.   a sample survey.

A scientist studying the behavior of wolves in North America collects the following information about a pack of six wolves near his research station:

- *Each wolf's gender.*
- *Each wolf's height*
- *The average number of hours per day each wolf spends hunting.*
- *Whether each wolf prefers to hunt in the woods, in fields, or shows no preference.*
- *An estimate of the average total weight of food eaten per day by each wolf.*

    37. This is an example of

        a.   an experiment.   c.   an observational study.

        b.   a census.   d.   a sample survey.

The next three questions concern the following scenario: An educational research company asked 500 high school males and 500 high school females across the U.S. about their cell phone use. In addition to their gender, students were asked, "How many text messages have you sent in the last week?" The company plans to compare the text-messaging habits of males and females.

    38. This is an example of

        a. an experiment.   c. an observational study.

        b. a census.   d. a sample survey.

    39. The population being studied here appears to be:

        a. Males and females

        b. High school students in the U.S.

        c. This group of 1000 high school students

        d. Cell phones owned by high school students in the U.S.

        e. Cell phones owned by this group of 1000 high school students

    40. The two variables in this study are:

        a. cell phones and text messages   c. cell phones and gender

        b. gender and text messages   d. high schools and cell phones

Short Answers—*Identify the population, sample, parameter, and statistic. Not all four labels will always be needed.*

22. In a USA Today Internet poll, 239 readers responded voluntarily to the question "Do you consume at least one caffeinated beverage every day?" The poll concluded that 61% consume at least one caffeinated beverage.

23. The U.S. Census states that 13% of all elementary school children are malnourished. A recent survey of 2,625 elementary school children found that 11% of the children could be classified as malnourished.

24. A recent survey by the alumni of a major university indicated that the average salary of all of its 300,000 graduates was $125,000.