

Vocabulary Matching

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| ____ 1. Survey | A. Measure or observe members of a sample in such a way that they are not affected by the study. |
| ____ 2. Observational Study | B. The first member of the sample is chosen at random and then each member selected after that is chosen at regular intervals. |
| ____ 3. Experiment | C. Every member of the sample is asked a set of questions. |
| ____ 4. Simulation | D. The entire group of individuals being studied. |
| ____ 5. Bias | E. A sample where members volunteer to participate. |
| ____ 6. Convenience Sample | F. An error that results in a misrepresentation of members of a population. |
| ____ 7. Voluntary Response Sample | G. A treatment is imposed to one group and a placebo is given to another group and results are compared. |
| ____ 8. Systematic Random Sample | H. A sample where members are readily available. |
| ____ 9. Simple Random Sample | I. A sample where all members are equally likely to be chosen. |
| ____ 10. Stratified Random Sample | J. An imitation of an experiment. |
| ____ 11. Cluster Sample | K. A subgroup of the individuals being studied that the study is carried out on. |
| ____ 12. Sample | L. Individuals are dividing into similar groups not based on any characteristic, and random groups are chosen. |
| ____ 13. Population | M. Individuals are dividing into groups based on a known characteristic, and a random sample of each group is chosen. |

14. A large corporation wants to find out which benefits plan its employees would prefer. Which procedure would be most likely to obtain a statistically unbiased sample?
- survey a random sample of employees from a list of all employees
 - invite all employees to indicate their choices by e-mail
 - place suggestion boxes at random locations in the company's plant and offices
 - assemble a group with one member from each department and record the preferences of these employees

15. A university polled 500 of its students, randomly selecting 25 students from each degree program. Classify the sampling method.
- simple random
 - stratified random
 - convenience
 - systematic random
 - voluntary response

16. To do market research, a telemarketing firm randomly selected 1000 names from a store's database and contacted them. Classify the sampling method.
- simple random
 - stratified random
 - convenience
 - systematic random
 - voluntary response

17. To get reactions about a particular new car, readers of a car magazine were asked to mail in their answers to a survey. Classify this sampling method.
- simple random
 - stratified random
 - convenience
 - systematic random
 - voluntary response

18. When a random starting point is chosen, followed by every n th individual, this sampling method is
- simple random sampling
 - cluster sampling
 - stratified random sampling
 - systematic random sampling

19. A simple random sample of 200 people is selected from the 1230 male students in a university psychology course to take part in a psychological test. The population being considered is
- all male students
 - all students
 - people taking part in the test
 - male students enrolled in a university psychology course

20. Which question is unbiased?
- Does the school board have the right to enforce a dress code?
 - Do you think the mayor is doing a good job in spite of his questionable character?
 - Do you prefer daytime or evening television programming?
 - Do you think the government should be allowed to cut down trees willy-nilly to build a new highway?

21. A doctor wants to test the effectiveness of a new drug on her patients. She separates her sample of patients into two groups and administers the drug to only one of these groups. She then compares the results. Which type of study *best* describes this situation?

Math III Unit 8 Statistics Review

Name _____

a. census

b. survey

c. observation

d. controlled
experiment

22. A school cafeteria has five different lunch periods. The cafeteria staff wants to find out which items on the menu are most popular, so they give every student in the first lunch period a list of questions to answer in order to collect data to represent the school. Which type of study does this represent?

a. census

c. observation

d. controlled
experiment

b. survey

23. Suppose that 900 American teens were surveyed about their favorite sport.

a. What would be the margin of error for this survey?

b. What is the 95% confidence interval if the survey found that 83% of the American teens surveyed loved basketball?

24. What sample size will yield a margin of error of $\pm 8\%$?