

AP Statistics - Chapter 4

For each situation, find the letter of term that best describes the main point of the passage. For instance, if you were to describe a 4-legged creature who says "Meow" the term "animal" is correct, the term "pet" is also correct, but obviously the best answer is "cat." So when you search for terms to describe the given situation, you want to focus on the main part of the given passage. To help you, concentrate on the words that are boldfaced.

**Not every term must be used. No term is used more than once. Whatever term is not used, develop a situation to use that term.**

1. I gather a bunch of people who have fevers and watch and record their body temperatures over the next 36 hours. **O**

AA

2. A tool you can use to choose subjects in an experiment so that every subject or group of subjects have an equal chance of being chosen. **AA**

3. Commercial that ask you to buy something frequently mention a toll-free number. It also mentions the price. If we wanted to measure how many people bought the object, we would want to study how many times the toll-free number was mentioned and how many times the price was mentioned. The term "toll-free" and "price" are each examples of **I**

4. In the above example, commercials were shown where the toll-free number was mentioned 1, 3, or 4 times, and the price mentioned 2 and 3 times. These numbers form a different **K**.

5. A college has 80% full time students and 20% part time students. I do a survey of 500 students and on purpose survey 50% full time students and 50% part time students. **A**

6. The question "Do you favor cracking down on illegal gun sales?" would be an example of **P**.

7. I want to find national opinion on the war in Afghanistan. The people of the United States is the **Q**.

8. A sold-out theatre has 20 rows of 30 seats. Reaction to the production is to be gauged by choosing two people at random from each row. The choosing of the people to be asked their reaction is an example of **Z**.

9. In conducting a nation-wide poll, I plan to use the Internet. My polling method would suffer from **AC**.

10. A researcher wants to find out if people can tell the difference between Chips Ahoy cookies and a generic brand. The subjects do not know what kind of cookie they are receiving but the person giving the cookies does. This study is known as **B**.

11. In the above example, if the person giving out the cookies does not know who gets what kind of cookie, the study is **F**.

12. A proper poll was asked to high school students in big cities and suburban schools. It asked whether you have ever been robbed at school. In city schools, 40% say they have been robbed while in suburban schools, 10% say they have been robbed. The results of this poll are **Y**.

13. In this school I decide to see how many people like 3 different pieces of software. I am concerned that teachers and students differ in their opinions so I have 3 groups of each consisting of 10 students and 3 teachers. Each group gets shown a different type of software. This is an example of **C**.

14. I ask a question on cable TV and invite people to respond to it. **AD**

15. I want to randomly select high school students in the state of California. I divide the state into 50 counties and randomly choose 5. In each county, I randomly choose 3 high schools. In each high school, I choose 10 students. Choosing students by this method is called **M**.

16. A teacher wants to see if grade ethanol will wake his lethargic classes. He asks a series of questions to the class and writes down how many participate. He then announces to the class that class participation is now part of their grade. He asks another series of questions and writes down how many participate. This is an example of **G**.

17. My bureau drawer contains 40 socks. I pull out 6 at random to see if I get at least one matching pair. The 6 socks would be a **U**.

18. I give a set of students a pre-test on their knowledge on the Civil War. Then I give them a chapter to read on the subject. Then I give them a post-test. The chapter they read would be an example of **AB**.

19. In comparing Coke vs. Pepsi, the Coke and Pepsi were both kept in different refrigerators by the people conducting the study. One person took the Coke out of the refrigerator an hour earlier than one taking the Pepsi out. The researchers were unaware of this fact. Their study may suffer from **S**.

20. In determining whether a new drug can reduce pain from arthritis, I need to test a large number of people in order to be more confident of my results. **T**

21. From a group of 1,000 people, I test 40 of them to see if they liked a product. If I find that 10 of them liked the product, and based on that result, I conclude that 25% of my 1,000 people will like the product, this is known as **X**.

22. From a group of 200 children, I want to choose 15 children at random to test a new type of bubble gum. To best select the 15 children, I want to take a **W**.

23. When we do a statistical study, we want to have a good number of test subjects. But more important is the use of **impersonal** chance to assign subjects to different groups. This is called **S**.

24. I want to test if a sugar substitute in coffee is liked by people. Some people I give the sugar substitute and some people I give sugar. The group that gets the sugar is called **E**.

25. I want to see how many people prefer Domino's to Pizza Hut Pizza. I take the people selected and give them each in random order and collect the results. This is known as **L**.

26. In choosing subjects for a study involving computers at Cal Berkeley, it is determined that 90% of the students are Windows users and 10% are Mac users. In choosing 40 subjects from 1,000 students, it is decided to include 36 Windows users and 4 Mac users. The choosing of the subjects based on the 90% Windows/10% Mac information is an example of **K**.

27. A survey is to be done within this school using the student phone directory. Phone calls are made during the evening to a sample of homes but unfortunately, some people are not home. So other homes are substituted. The sampling method would suffer from **N**.

<del>A</del>	Bias	<del>X</del>	Level	<del>V</del>	Sample	<del>AE</del>	Placebo
<del>B</del>	Blind Experiment	<del>X</del>	Matched Pairs	<del>V</del>	Sampling Frame	<del>AF</del>	Placebo Effect
<del>C</del>	Blocking	<del>X</del>	Multistaged Sample	<del>W</del>	Simple Random Sample	<del>AG</del>	Response Bias
<del>D</del>	Confounding	<del>X</del>	Nonresponse	<del>X</del>	Statistical Inference	<del>AH</del>	Convenience Sampling
<del>E</del>	Control	<del>X</del>	Observational Study	<del>X</del>	Statistically Significant	<del>AI</del>	Cluster Sampling
<del>F</del>	Double Blind	<del>X</del>	Poorly Worded Question	<del>X</del>	Stratified Random Sample		
<del>G</del>	Experiment	<del>X</del>	Population	<del>AD</del>	Table of Random Digits		
<del>H</del>	Design	<del>X</del>	Probability Sampling	<del>AS</del>	Treatment		
<del>I</del>	Factor	<del>X</del>	Randomization	<del>AT</del>	Undercoverage		
<del>J</del>	Hidden Bias	<del>X</del>	Replication	<del>AV</del>	Voluntary Response		

Key