

7.SP.1: Worksheet

1. When it's too difficult to study all of the objects in a population, we instead study a _____ of the population.
2. We can use a sample to make inferences about a population, if the sample is _____ of the population.
3. The name of a technique that usually produces representative samples of a population is _____.
4. For which of the following populations would it be most necessary to study using a sample?
 - (A) Students in one seventh grade class
 - (B) Teachers in a school
 - (C) The members of a school's soccer team
 - (D) Seventh grade teachers in the state of California
5. Give an example of a population that would most likely require a sample in order to study.
6. A math teacher wants to know, on a scale of 1 to 10, how much students in a middle school enjoy math class. Which of the following samples is most likely to be representative of all of the students in the school?
 - (A) Twenty students on the math team
 - (B) Twenty students whose names were picked out of hat that contained the names of all the students
 - (C) Twenty students who earned high grades in their math classes last year
 - (D) Twenty students who failed their math classes last year
7. Describe a method to randomly select a sample of ten people from a list of eighty.
8. Kate wants to know the average cost of a gallon of milk at the grocery stores in her city, so she goes to the three grocery stores closest to her house. Is this an example of a random sample? Why or why not?
9. Which of the following statements are true about random sampling?
 - (A) Every individual or object has an equal and independent chance of being selected for the sample.
 - (B) The sample is selected using some chance process.
 - (C) The results of random sampling tend to produce samples that are representative of the population.
 - (D) All of the above statements are true about random sampling.
 - (E) None of the above statements are true about random sampling.
10. The Chicago Bears are playing the Denver Broncos in a football game one weekend. Luca wants to know which team football fans in the U.S. think will win the game. Which of the following samples is the least likely to be representative of the population?
 - (A) Fifty randomly selected fans in New York
 - (B) Fifty randomly selected fans in Houston
 - (C) Fifty randomly selected fans in Philadelphia
 - (D) Fifty randomly selected fans in Chicago