

In each situation, identify the population and the sample.

1. Mikayla surveyed her science class to identify the K pop group most listened to by the students in her grade.

Population = Students in the grade Sample = Mikayla's science class

2. David is interested in politics in his town. He stands at a busy street corner asking people whom they plan to vote for in the upcoming election.

Population = People in David's town Sample = People David asked

3. The counselor at Generic Middle School wonders about the GPA of the students. The counselor randomly calls 20 students to their office and asks them their GPA.

Population = Students GPA at Generic Middle School Sample = 20 students called to the office

4. Dwayne owns a fitness center. He asks members at the 5 o'clock Spin class if they would like to have Lift A Thon to raise money for a local charity.

Population = Members of Dwayne's fitness center Sample = Members at the 5 o'clock Spin class

For 6-10, use the situation to answer the following questions.

Sully loves Pokémon. He has a huge stack of Pokémon cards. He wants to know if he needs more "water" type cards so decides to sample his cards. He has several ideas for sampling his cards.

6. What is the population? Huge stack of Pokemon cards

Sampling ideas:

7. Pull the top 8 cards off the top of the stack.

What type of sample is it?

- (A) Simple Random Sample
 (B) Convenience Sample
 (C) Systematic Sample
 (D) Census

8. Put the cards in a bag and randomly select 8 cards.

What type of sample is it?

- (A) Simple Random Sample
 (B) Convenience Sample
 (C) Systematic Sample
 (D) Census

9. Pull every 5th card from the stack.

What type of sample is it?

- (A) Simple Random Sample
 (B) Convenience Sample
 (C) Systematic Sample
 (D) Census

10. Look at every card in the stack.

What type of sample is it?

- (A) Simple Random Sample
 (B) Convenience Sample
 (C) Systematic Sample
 (D) Census

Identify the sampling technique for each scenario. Simple Random, Convenience, or Systematic Sample.

5. A bottled water company wants to find out why people choose a particular brand of bottled water.
(A) Call every 20th person who mails in a coupon as part of a money-back offer on the purchase of their bottle of water.

Systematic Sample

- (B) Call 400 numbers chosen randomly from all the residential phone numbers in the city.

Simple Random Sample

- (C) Ask the first 20 people seen carrying bottled water in a park on a summer day.

Convenience Sample

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For 11-13, use the situation to answer the following questions.

Generic Middle is setting up a student council to represent the 150 students in 6th grade. They have several ideas for sampling the 6th graders.

11. What is the population? 150 students at Generic Middle in 6th grade

Sampling ideas:

12. Take the first 10 students that show up to school on Tuesday.

What type of sample is it?

- (A) Simple Random Sample
(B) Convenience Sample
(C) Systematic Sample
(D) Census

13. Randomly number all the 6th graders. Take every 12th sixth grader on the list.

What type of sample is it?

- (A) Simple Random Sample
(B) Convenience Sample
(C) Systematic Sample
(D) Census