Date:

Practice: Populations and Samples

#1 Determine if the question below is biased or unbiased. Justify your answer. Do you prefer to eat nutritious vegetables or greasy French fries? #2 Determine if the sample described below is biased or unbiased. Justify your answer.

You want to find out what restaurant at the Food Court has the best food. You ask every 5th person who enters the Food Court.

#3 Determine if the sample described below is biased or unbiased. Justify your answer.

You want to find out how many students at your school go to extra help on a regular basis. You ask 50 students who are getting on the late bus. #4 You want to find out if the people in your town support the new mayor. What unbiased question would you ask? How would you collect an unbiased sample?

#5 You are collecting data to find out what the most popular lunch choice is. Each lunch period, you ask 15 students who buy lunch. There are 4 lunch periods a day. 25 students choose pizza. If there are about 600 students who buy lunch each day, about how many can you predict will buy pizza?

#6 You want to find out what type of pet is most commonly adopted from the shelter. Over the course of a month, you randomly survey 40 people who have just adopted a pet. Of those 40 people, 23 adopted dogs. If about 4,500 people adopt pets each year, about how many can you predict will dogs?