

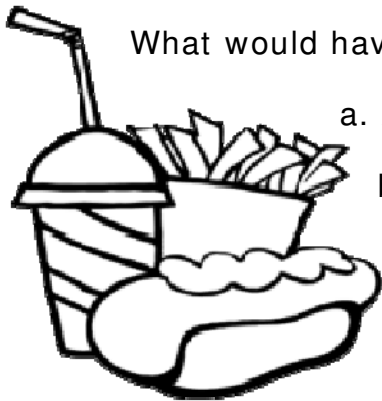
Name \_\_\_\_\_

Date \_\_\_\_\_

## Understanding Random Sampling - Independent Practice Worksheet

1. Harry collected green balls in a bag. He drew two balls, of the five balls, out of the bag. Is this a random sample of the green balls in the bag?

2. Daisy wants to find out where the greatest number of people buy fast food for lunch. He surveys every fourth person on a random street and asks them where they get food for lunch regularly?



What would have been an improvement in Daisy's experiment?

- a. Ask people their favorite lunch food.
- b. Survey all people in the area.
- c. Ask people where they get breakfast.

3. Jack is trying to determine the best location to sell hot dogs. There are 4 different licensed locations in the city (on the street, downtown, near the garden, and in the school canteen). Jack observed that many people tend to visit downtown and the garden. Jack decided to sell hot dogs in the downtown area where he saw that the most people gather.

What changes to Jack technique would have giving him a better understanding of where he would be the most successful selling hot dogs?

4. Kerry collected shells from a sea shore in a box. He takes out a handful of shells from the box. Is this a random sample of shells in the box?



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5. There are four doctors in the city. Their offices are located in four different parts of the city (South Street, Downtown, Outskirts Alley, and West Street). Kevin is trying to figure out which doctor has the most patients. He observed that the Downtown and West Street areas have larger populations. He concurred that the doctors in those areas have more patients. After comparing those two areas, he decided that the West Street doctor had the most patients because the area had the most traffic.



What changes to Kevin technique would have giving him a better understanding of which doctor has most patients?

6. Drew tries to predict which restaurant will have the least amount of business during Christmas season. There are three restaurants in city. Two are on the outskirts of the city and one is in the city. He learned that two hotels situated on the outskirts are fully booked because one has a Christmas show and the other restaurant has a huge indoor pool. From this information he inferred that the restaurant in the city will have the least amount of business during the Christmas season.

What would have been an improvement in Drew's experiment?

- a. Ask people at the restaurants if they like fast food.
- b. Survey all people to see which December holiday they celebrate.
- c. Look at the past Holiday performance of the restaurants.

7. Terry had white and red marbles in a container. He takes out 4 marbles, without looking in the container. Is this a random sample of marbles in a container?



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8. Fred is releasing his new album of jazz music. He can only release the album in one store. He wants to know where his release would be the most successful in the city. He observed that the downtown area people and college students love jazz music the most.

He then decided to release the album in downtown store because he felt college students might not be able to afford the album.

What changes to Fred technique would have giving him a better understanding of where his release would be the most successful?

9. Jeffery is comic writer. He wants to write new comics for children. He wants to write comics that are specific for his readers. He decides to write the comic specifically for one local elementary school. There are five local elementary schools he is considering. Jeffery wants to write the comic for the most people possible. Which is the **best question** to ask schools to determine which elementary school has the most students?

- a. How many school buses drop off students every morning at your school?
- b. How many photo copiers does your school have?
- c. How many student chairs are in your school?
- d. How much milk is consumed at your school every year?

10. George put some assorted color shirts into a bag. He looks in the bag and removes the blue shirts from the bag. Is this a random sample of the shirts in the bag?

