Date _____

Making Inferences From Random Data - Independent Practice Worksheet

Solve all the problems.

1. Scientists in the jungle want to find the best estimate for the lion population. They tagged and released 20 lions as part of a research project. Later, they found 160 lions, 8 of which were tagged? Find the best estimate of population?

2. Ronald works in an Ornithology department. Students asked him to find out the best estimate of the local bird population. So he tied a belt around the legs of 40 birds. A few days later, he observed 520 birds, 34 of which had belts. To the nearest whole number, what is the best estimate for the bird population?

3. Henry has a stationery shop in school. He surveyed and collected random samples of 100 students regarding student's pen preference? Make at least two inferences based on the results.

Student Sample	Crystal Pens	Metal Pens	Plastic Pens	Total
#1	32	48	20	100
#2	18	67	15	100

4. Sam is a school leader. She wants to decide whether makeup should be allowed in school or not? She collected random samples of 100 females regarding make up preference. Make at least two inferences based on the results.

Student Sample	Mascara	Lipstick	Eye liner	Total
#1	46	26	28	100
#2	60	17	23	100

5. Farmers marked 45 cows and released them. The next day they counted 150 cows, 15 of which had marks. Find the best estimate for the cow population in village?



6. The animal department wants to estimate baboon population. So they paint 50 baboons with a mark. These baboons were then released into the jungle. After two months, 300 baboons were caught. Among these baboons, 25 were marked. To the nearest whole number, what is the best estimate for the baboon population?

7. The government of Mexico declared blue sharks an endangered species. They put tags on 36 blue sharks and released them. Later, they corral 130 blue sharks; among those blue sharks, 20 were tagged. Find the best estimate for the blue shark population?

8. The local food surveyors collected data of two random samples of 100 children regarding their food preference? Make at least two inferences based on the results.

Student Sample	Apples	Banana	Grapes	Total
#1	62	20	18	100
#2	68	18	14	100

9. Snake charmers want to estimate the population of a particular species of cape cobra. They mark 20 cape cobras with a radioactive tag. After few months they catch 190 cape cobras, 17 of which had marks. What is the best estimate for the cape cobra population?

10. Andrew is planning what to buy for a garments store in the downtown area. He collected two random samples of 100 men regarding their men's wear preference? Make at least two inferences based on the results.

Student Sample	Jeans	Pants	Shorts	Total
#1	78	10	12	100
#2	64	22	14	100