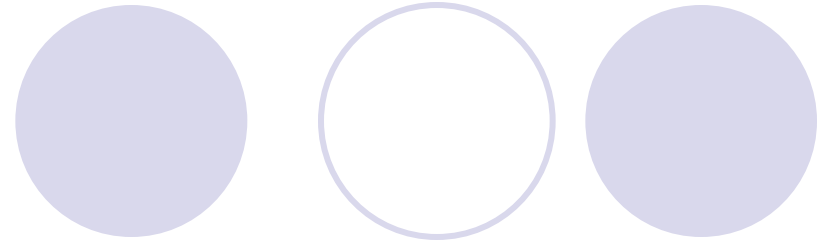


The slide features five light purple circles arranged in two rows. The top row contains three circles, and the bottom row contains two circles. The text '2.3 Collecting Samples' is centered over the top row of circles.

2.3 Collecting Samples

Each Expert Pair



- Produce a note including
 - A definition
 - An example of how to apply the method to our school
 - Explain the example from the text
- Present your note so that everyone ends up with a completed lesson

Simple Random Sampling



- A sample that is randomly selected. It requires that all selections must be equally likely and all combinations must be equally likely.
- The example in the book uses a partial table of random numbers and two dice to make sure that they selected the apartments to be surveyed.
- Survey to find out if students are satisfied with the cleanliness of the washrooms. Use a random numbers table to select the last digits of the official student number for 70 students.

Systematic Random Sampling

- Used when you are sampling a fixed percentage of the population. Choose a random starting point and then select every n th individual.
- The example in the textbook uses 20 apartments and wants to survey 25% of them. Therefore it picks a random starting apartment and surveys every 4th apartment after that.
- Survey 50% of 100 people who have taken Ms. Fretz's gr 12U English class. $100/2 = 50$ so you would survey every 2nd person starting with someone in particular.

Stratified Random Sampling



- The population is divided into groups called strata (geographic, ages, workplaces etc.). A random sample is taken from each strata, with the size of the sample proportional to the size of the strata.
- The example in the textbook used four geographic areas in Canada, and a random sample of the people in the largest city in each area.
- SAC wants to find out about participation in intramurals. They could select strata by grade, ages, gender, or skill level, and then select a random sample from each strata.

Cluster Random Sampling



- The population has to be organized into groups. Select a random sample of the groups then survey every member of that group.
- The example in the textbook wants to know something from elementary students. They randomly selected 2 of the 5 elementary schools in the board and then surveyed every parent in those 2 schools.
- Students are separated into homerooms. 7 out of the 16 homerooms would have all students asked their opinions on the frequency of assemblies at MV.



Multi-Stage Random Sampling

- Make your own note from the textbook.

Destructive Sampling



- Samples from which the selected elements cannot be reintroduced into the population
- Ex: Light bulbs tested for quality control
- Ex: Cars used in crash tests



Homework

- Pages 99

- #1-3, 5, 8, 10, 12

