There are 5 types of Sampling Techniques - ways to choose a sample to study.

- **Samples** are chosen when the whole population cannot be studied. They should give us the most accurate measure possible of the whole population.
- The **good** techniques are the ones in which every member of the population has an opportunity to be chosen for the sample.
- The **bad** technique does not allow for all members of the population to be represented.

If **all** members of the population are not represented, then the sample cannot possibly tell us what the population might really be.

**Simple Random** - "SRS"

1) assign a numerical label to all individuals of the population, then
2) randomly pick numbers.

*ex. drawing names from a hat, random number table, random number generator*

**Systematic**

1) randomly select a beginning number, then
2) select every n<sup>th</sup> person after that.

*ex. starting with #2, and selecting every 3rd student from the directory*

**Cluster**

1) divide population into groups, then
2) randomly select groups and interview everyone in that group.

*ex. randomly select homerooms and survey everyone in them*

**Stratified**

1) divide population into groups, then
2) randomly select some members from each group.

*ex. randomly select 10 freshmen, 10 sophomores, 10 juniors, and 10 seniors*

**Convenience**

select individuals that are easy to reach

*ex. random telephone surveys, asking your classmates*

This is a biased sample, because it is unlikely that this sample represents the population of interest.
Sampling Methods

Deciding the correct method...

Is the population split into groups?

- yes
- no

- Stratified
- Cluster
- Simple
- Random

Some of All
- groups

Every __th or NOT?
- Systematic

- Simple

- Random

Bring your book EVERY DAY starting TOMORROW.

First, decide if it is convenience or not. If not, then -

Ex 1. Glamour magazine collects data on its readers by asking them to fill out and send in a survey from the March issue.

- convenience

Ex 2. A farmer divides his orchard into 50 subsections, randomly selects 4, and samples all the trees within those subsections.

- cluster

Ex 3. A group of lobbyists has a list of the 100 senators. They decide to talk to every 7th senator on the list about their position on farm subsidies.

- systematic

Deciding the correct method...

Bring your book EVERY DAY starting TOMORROW.

Ex 4. A teacher puts all her students' names in a hat, then selects 3 names from the hat. These students will take a standardized test.

- simple random

Ex 5. The president of a college randomly selects two students from each department to serve on a board.

- stratified

Ex 6. Which of the previous examples is not good to use?

- convenience

Bring your book EVERY DAY starting TOMORROW.

Sampling Methods Worksheet

Due in 10 minutes.

Underline ALL evidence.

Oct 7-7:45 AM

Oct 7-7:44 AM

Aug 30-10:52 AM

Apr 21-9:45 AM