

1.2 Random Samples

* Add definitions to notes
pg. 1-7, 11-15 odd

Number Students as they enter

Simple Random Sample - subset of a population in which every member and every sample size has an equal chance of being included

Complete #9 as a class

Random number table:

- ⊕ Choosing a number between 1 and 300 means a 3 digit number. Group digits in blocks of 3. Skip numbers not in the sample or repeated numbers
- ⊕ Choosing between 20 and 1000 means a 4 digit number, etc.
- ⊕ choose 3 students in the class using table

Arrange students in age order

Systematic Sampling - elements in the population and arranged in sequential order. Sampling begins at a random place and every n th element is chosen until sample size is reached

* errors may occur if the population is repetitive or cyclic
i.e. errors on a printing wheel

Group together by enrollment for '15

Stratified Sampling - population is grouped by common characteristics (strata) then random sampling occurs within each stratum

total sample may be weighted according to size

Shipwreck

Cluster Sampling - populations are separated into clusters, then a complete cluster is chosen as the sample

Sampling with and without replacement
(popsicle sticks)

Convenience Sampling - using readily available samples

i.e. waiting outside a basketball game to question fans on preferences

* heavily biased based on choice of location

Simulation - mathematical imitation of real life situations

i.e. Basketball game: even (+2) odd (-2)

∅ must be even

#8 a, b as a class