Video: A sample needs to be ==representative== of the population. One of the keys in doing this is to ==replace== human selection with a ==random== selection. It eliminates the possibility of conscious or unconscious bias in our sample. The "Women and Love" sample suffered from voluntary response bias.
At what stages of the production process does Frito Lay utilize sampling?

Lessons learned from Random Rectangles:
- Only ==random selection== can combat ==bias.==
- ==Sampling variability (error)== is ever-present, and ==less problematic than bias.==

Randomization	The best defense against bias. (==stirring== to make sure that on average the sample looks like the rest of the population)
Simple random sample (SRS)	A sample in which each set of n elements in the population ==has an equal chance of selection.== The standard method of utilizing ==randomization== to make the sample ==representative of the population of interest.==
Sampling variability (Sampling error)	The natural tendency of randomly drawn samples to ==differ from each other.==

The precision of the statistics of a sample depend on _____ not _____	==the sample size (soup spoon size)== ==its fraction of the larger population.==
Census	A ==sample== that consists of ==the entire population.==
Sampling frame	A ==list== of individuals, which ==clearly defines but may not be representative== of the entire population, from which the sample is drawn.

Simple Random Sample (SRS)

Stratified samples	These samples can ==reduce sampling variability== by identifying ==homogeneous subgroups== and then ==randomly sampling== within each.
Cluster samples	These samples ==randomly select among heterogeneous subgroups== that each resemble the population at large, making our sampling tasks more manageable. (convenience)
Systematic samples	These samples can work, when there is no relationship between the ==order== of the sampling frame and the ==variables of interest==, and are often the least expensive method of sampling. But we still want to start them ==randomly.==
Multistage sample	A sampling scheme that ==combines several== sampling methods.
Identify the W's: Why What Who When, Where, and How	Population and associated sampling frame. Parameter of interest and variables measured. Sample actually drawn. Given by the sampling plan.