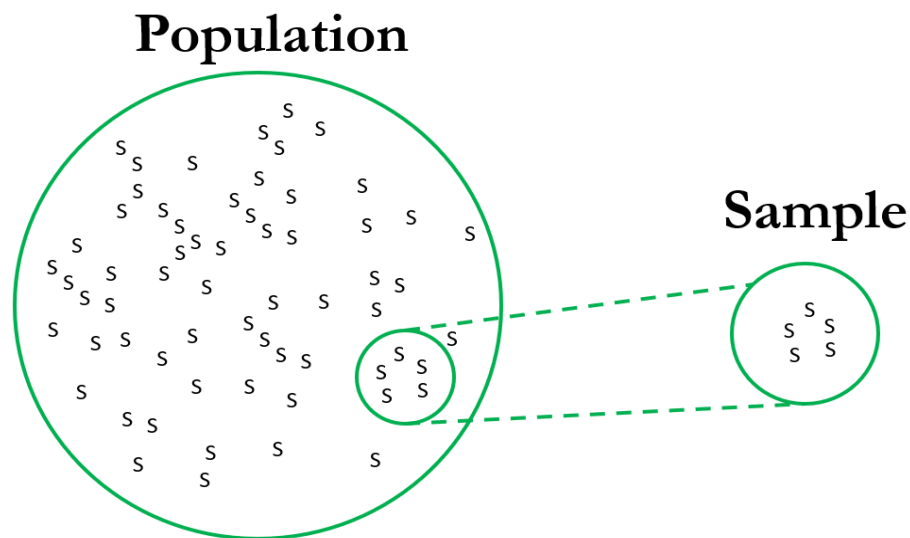


Review III of DS 1: Statistical Concepts

1. Population, Sample and Observational Unit

- **Population** - a collection of units/elements being studied.
- **Sample** - a collection of units/elements from a population.
- **Observation Unit** - an object or element described by a set of data



Example - Do Maryland teenagers pay their taxes?

- Population - Maryland teenagers
- Sample - Randomly select Sherwood High School Students
- Observational Unit - A Maryland teenagers

2. Variables

Quantitative Variable - a variable that can take numerical values on which ordinary arithmetic operations make sense

Categorical Variable - a description

Categorical Binary Variable - a description that has only two options

Example - Do Maryland teenagers pay their taxes?

- Job (Yes/No) (**Categorical Binary**)
- Monthly Salary (**Quantitative**)
- Type of Job (Food, Cleaning, Other) (**Categorical**)
- Grade Level (Freshman, Sophomore, Junior, Senior) (**Categorical**)
- Distance in miles between job and home (**Quantitative**)