

Before making any study in statistics, you need to make sure to gather your data, the following vocabulary brings an introduction to planning a study.

- a. Use [this](#) online resources to find appropriate statistical definitions of each of the following terms 1-10.

<p>1. Data</p>	
<p>2. Sample vs Population</p>	<ul style="list-style-type: none"> • Please provide some examples.
<p>3. Sample Survey</p>	

4. Observational Study. 5. Experiment	
6. The experimental units.	
7. A randomized block designs.	<ul style="list-style-type: none">• Make sure to provide definition and examples. A picture is a bonus.
8. Matched Pairs Design.	
9. Placebo.	
10. Completely randomized design.	

- b. Please list the five-numbers summary and represent them by whisker plot.
- c. Using the 5-numbers summary, make a whisker plot of the following data, make sure to calculate each number and show your work.
A sample of 10 boxes of raisins has these weights (in grams): 25, 28, 29, 30, 34, 35, 35, 37, 38.
This [link](#), can help you the figure out the 5-numbers.
- d. Give a statistical definition to categorical variable and quantitative variable, with some examples.