

ESA 21: Environmental Science Activities

Capstone Activity
Module 1

Name:

Lecture Professor:

Experimental Design:

List the null hypothesis, independent variable, and dependent variable for the study.

H_0 :

Independent variable:

Dependent variable:

Explain how you chose to measure the size of the leaves/needles, along with your rationale.

Data:

Create a table for your data in the space below. Include a title and follow all formatting requirements.

Table 1:

Descriptive Statistics:

Provide the statistics below for your two groups.

Table 2:

	Mode	Median	Mean	Std. Dev.

Inferential statistics:

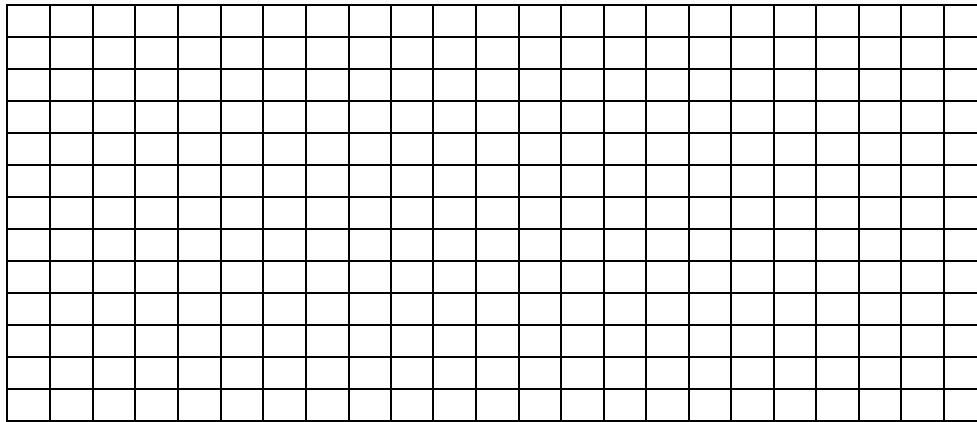
Refer back to your null hypothesis, and complete the t-test table for your data set.

t-statistic	p-value	Do you reject the H_0 ?

Data presentation:

Graph your data below, following all formatting requirements. It is advisable that you review the sections on graphing, particularly the one on *what* to graph, prior to creating the graph.

Figure 1:



Conclusion:

Summarize the results of the study in your own words, referencing the descriptive statistics and Figure 1. Restate your null hypothesis, and evaluate it based upon the results of the t-test. Address the assumptions of the study and comment on any facet of the experimental design you deem appropriate.