Biology Name: _____

Analysis Worksheet Period: _____ Date: _____

Title of the Lab: _____

Purpose of your experiment: _____

What Is Your <u>Claim?</u>**:** _____

Evidence

Provide the evidence	Evaluate the evidence		Rate the worth of the evidence
(Data: diff. btwn. data set averages; trials; St.Dv.; Observations; other?)	For Data: was value greater than/ equal to/ less than expected; <u>*by how much?*</u>	What does the data show? How does it support or refute the claim?	Strong / average / weak
Leaf area (top verses bottom)			
Leaf thickness (top verses bottom)			
Stomata density (top <u>v</u> bottom)			
Other observed differences			

Reasoning

Does Your Evidence Conform to What Science Says You Should Expect? Elaborate!	How Does The Scientific Principle Connect Your Evidence to Your Claim?

Sources of Error

Error Description	What Is Its Effect On Your Data? Did It Cause It To Increase/ Decrease/ Vary Up or Down/ Be Totally Incorrect?	Do You Think This Error Had a Large/ Moderate/ Small Effect on Your Results? (Explain; try to provide a numerical estimate)
Experimental Errors (occurred because of your design)		
Human Errors (things that you KNOW you did wrong when conducting the lab)		

Draw a Conclusion

If you have correctly completed this worksheet you should now be able to use logically consistent reasoning, with appropriate scientific support, to draw a conclusion about your results and your claim.

Below are some possible conclusions. Decide which one best fits your experiment and _elaborate on it_ in the space provided.

My results agree with the accepted scientific understandings and my errors (design or human) did not significantly affect my results. Therefore I can conclude that

My results agree with the accepted scientific understandings but my errors (design or human) were so significant that I cannot trust them. Therefore I can conclude that

My results do not agree with the accepted scientific understandings but I can explain why with the errors (design or human) in my lab. Therefore I can conclude that