**Transpiration Posting Instructions – Group/Electronic - 50 pts.**

**Due:**

**Purpose/Question:**  **2 pts.**

In your own words state the purpose of this lab.

**Background: 10 pts.**

Answer all questions from our pre-lab/Lab Background sheet. Paragraph or sentences.

**Procedure: 5 pts.**

Numbered list with instructions for setting up the plants. Be certain to include the different environments in the room.

Highlight in your procedure or describe separately all **constants** across experimental groups.

**State your hypothesis for the plants in our experiment. 4 pts.**

**Data: 6 pts.**

Data table #1 (typed-no photos please). Your data table must include each plant’s initial mass & 4 days of experimental weights.

Data table #2. Show the cumulative % change each plant.

**Data Analysis: 10 pts.**

Create a graph of data table #1 for each plant.

Write a statement addressing the change for each plant individually (increase, decrease, stay the same).

Identify the independent and dependent variables for this lab.

Which plant had the greatest rate of change? How do you know?

**Conclusion: 10 pts.**

1. Did your results and hypothesis match? Explain.
2. Discuss possible sources of error within your group or with our lab set-up. Be certain to explain how we would see a different outcome due to the errors.
3. Explain the role of water potential in the movement of water from soil through the plant and into the air.
4. Describe several adaptations that enable plants to reduce water loss from their leaves. Include both structural and physiological adaptations. Include but do not limit your answer to: What is the advantage of closed stomata to a plant when water is in short supply? What are the disadvantages?
5. Research! How do CAM and C4 plants relate to transpiration?

**Citations used for background or conclusion: 3pts.**