

Select 2 types of plant and run a simulation of the transpiration experiment using a normal condition, increased temperature (heater), increased wind (fan), and increased light conditions.

Record your observations below: (4 pts)

Amount of Water Transpired in 1 Hour (mL)				
Plant Type	Normal	With Fan	With Heater	With Light

Analysis: (Please put your answer on a separate page.)

- 1.) Describe the process of transpiration in vascular plants. (3 pts)
- 2.) Describe any experimental controls used in the investigation. (1 pt)
- 3.) What environmental factors that you tested increased the rate of transpiration? Was the rate of transpiration increased for all plants tested? (2 pts)
- 4.) Did any of the environmental factors (heat, light, or wind) increase the transpiration rate more than the others? Why? (2 pts)
- 5.) Which species of plant that you tested had the higher transpiration rate? Why do you think different species of plants transpire at different rates? (3 pts)
- 6.) Suppose you coated the leaves of a plant with petroleum jelly. How would the plant's rate of transpiration be affected? (1 pt)
- 7.) Of what value to a plant is the ability to lose water through transpiration? (2 pts)