

**Materials Needed:** Tree or shrub, clear plastic bag, rubber band or string, paper

**Questions for the Scientist:**

1. How does transpiration occur?
2. What happens to water during transpiration?

**State Your Hypothesis:** \_\_\_\_\_

**Procedures:**

1. Identify a bush or tree you can use for this experiment.
2. Select a branch that contains several leaves.
3. Place a clear plastic bag over the end of the branch and be sure to include several leaves. Use a rubber band or string to enclose the end of the branch in the plastic. Be sure to seal it very well.
4. Monitor the bag over a 24-hour period (or longer if you wish). Record what you observe every hour for the first several hours and periodically thereafter. Be sure to document the time of each observation.

**Key Questions:**

1. Describe what you observed over the 24-hour period. What occurred?
  
  
  
  
  
  
  
  
  
  
2. Explain the transpiration process and identify the evidence you collected that proves this process occurred.

**Results and Application:**

After studying your results, what conclusions can you draw? Do your results support your hypothesis? Explain your reasoning.