

Name _____

Per _____

TRANSPIRATION WEBQUEST <http://passel.unl.edu/pages/animation.php?a=transpiration.swf>

Objectives

- ⇒ Describe how the driving forces for water movement and their rates of transpiration.
- ⇒ Describe how environmental conditions alter rates of transpiration & how the plant is able to alter rates of transpiration.

CLICK ON ROOT DETAIL

1. How does the water enter the root
2. Describe the three paths water can take?
3. How does water enter the xylem?

CLICK ON STOMATA DETAIL

1. What are primary functions of the stomates?
2. What environmental factors control the stomates?
3. What are guard cells?
 - a. What controls the shape of the guard cells?
4. Explain how the stomates open and close

CLICK ON XYLEM DETAIL

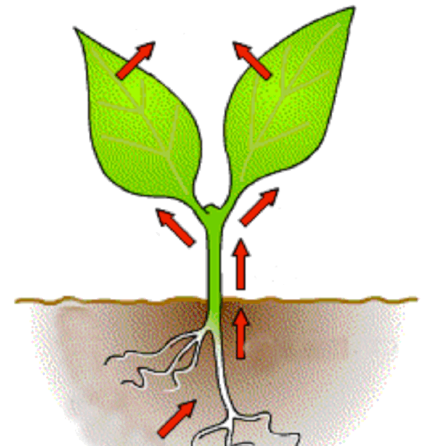
1. What is xylem, and what does it transport?

PLANT PARAMETERS

1. What is the purpose of the **Cuticle**?
 - a. What happens to the plant if you increase it?
 - b. Decrease it?

ENVIRONMENTAL CONDITIONS

2. What is **Humidity**?
 - a. How does it affect transpiration rates?
 - a. What is the result of increasing the relative humidity?
 - b. Decreasing it?
3. Why does **Temperature** affect transpiration rates?
 - a. Explain what happens when you increase the temperature.
 - b. What is the result of decreasing the temperature?
4. What affect does **Light** have on the stomates?
 - a. How does it affect transpiration rates?
 - b. Is light required for Transpiration? Why or why not?
 - c. What wavelengths of light trigger the stomates?
5. What affect does the **Wind** have on transpiration rates?
 - a. Why does it change the rate of transpiration
 - b. What is the affect of too much wind on a plant?



LABEL ME!!!!!!!