

Science Experiment – Do Plants Sweat to Stay Cool?

First watch the video: Homeostasis in Plants https://www.youtube.com/watch?v=24b8olsZ_gw&app=desktop

Step 1: Ask a Question What is the problem?

How do plants manage their water content on hot days?



Step 2: Make a Hypothesis Guess what will happen when we put plastic over the plant leaves.

PICK THE ONE YOU THINK WILL BE TRUE:

The plant will sweat (lose water) from its leaves so it will be wet in the plastic bag.



OR

The plant will NOT sweat (lose water) from its leaves so it will NOT be wet in the plastic bag.



Step 3: Do the Experiment



Supplies: plastic bag



; Tape or string



; A plant with leaves



Procedure:

- 1) Take plastic bag and the tape or string outside and find a live plant that has a branch with green leaves you can attach the bag to.
- 2) Use the string or tape to secure the bag around the leaves so it won't fall off. It should look like this



Step 4: Organize the Data – indicate the response of the plant in the plastic bag

After 10 minutes: The leaves were wet in the plastic bag.



OR The leaves were NOT wet in the plastic bag.



After 1 Hour: The leaves were wet in the plastic bag.



OR The leaves were NOT wet in the plastic bag.



After 2 Hours: The leaves were wet in the plastic bag.



OR The leaves were NOT wet in the plastic bag.



Step 5: Find the Conclusion – What did you learn from the experiment?

The plant did sweat (lose water) from its leaves so it was wet in the plastic bag.



OR

The plant did NOT sweat (lose water) from its leaves so it was NOT wet in the plastic bag.

