

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## 1 OBSERVE

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Take a few minutes to look closely at the leaves. Sketch a picture of your leaf here:

What type of plant did the leaf come from? \_\_\_\_\_

## 2 PREDICT

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Which part of the plant do you think absorbs carbon dioxide ( $\text{CO}_2$ ) from the air?

- The top of a leaf
- The bottom of a leaf

## 3 PREPARE YOUR SPECIMEN

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Follow the instructions the "Preparing Your Specimen" sheet.

## 4 OBSERVE AND DOCUMENT

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Draw and take notes about the structures that you see in the microscope.

Talk with your lab partners: Do you think carbon dioxide ( $\text{CO}_2$ ) can get into the plant through any of the structures that you see in the microscope? If so, which ones?

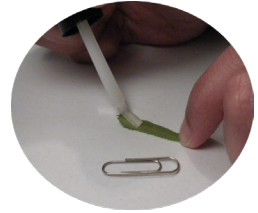
## PREPARING YOUR SPECIMEN

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1. Lay the leaf flat on the table, with the side that you want to examine under the microscope print facing up.



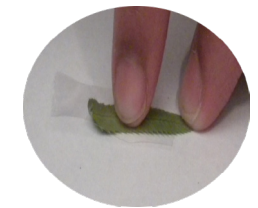
2. Paint a thin layer of clear nail polish on the leaf.



3. Wait a few minutes, then gently test a corner of the nail polish to make sure it is completely dry.



4. If dry, take a small piece of tape and put it directly over the nail polish on your leaf. Rub your finger over the tape firmly to make sure it is stuck to the nail polish.



5. Slowly peel the tape off of the leaf. The nail polish should remain on the tape.



6. Stick the tape to the center of a microscope slide. Then, place on the stage of your microscope.

