

# Losing Water

## Procedure

- 1. Collaborate** Work in a small group. Record your observations in the chart below.

Time	Uncoated	Coated on Top	Coated on Underside	Coated on Both Sides
1 hour				
2 hours				
3 hours				
1 day				
2 days				

- 2. Experiment** Carefully smear petroleum jelly on the top and underside of one of the plant leaves. Coat another leaf on the top surface only. Coat a third leaf on the underside only.
- 3. Experiment** Slide a bag over each of the coated leaves and close it with a twist tie. Cover a fourth, uncoated leaf with a bag, to serve as a control. Place the plant in a sunny window and, if needed, water it.
- 4. Predict** Based on what you have learned about leaf structure, predict what will happen inside each bag. Record your predictions on the lines below.

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**5. Record Data** Check the leaves every hour for three hours. Use the chart to record your observations.

## Conclusion

Write the answers to the questions.

**1. Analyze Data** With others in your group, discuss your results. Consider different explanations.

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**2. Predict** Based on your results, discuss with your group what will happen if you leave the bags on the leaves for two more days. Give reasons for your prediction.

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**3. Experiment** Continue the experiment for two days or longer. See if your prediction holds true.

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## Investigate More!

**Design an Experiment** Plan a similar experiment with a different kind of plant. For example, you might choose a cactus or an evergreen plant.

