

Student Instruction Sheet

Module 5: A Look at Tobacco and Nicotine

1. Talk with your class about smoking. What do you know about it? What effect does smoking have on your health?
2. You will be working in a group of four students to do an experiment. The teacher will assign the groups. Find your group now and decide who is going to collect the materials from the distribution center.
3. Take a minute to read over the instruction sheet. With your group, write a hypothesis. What do you think the experiment is going to show? Write down your group's hypothesis on your log sheet. A good hypothesis might start with the words, "We predict that..."
4. Take the cups and fill them with water. Label one "Cigarette," a second one "Leaf," and the third one "Water." Put a cigarette in the first cup, and a leaf in the second cup. Don't put anything but water in the third cup. The third cup is called the control. The control is used to show what happens to plain water over time. In this way, by comparing all three cups with each other, we learn that changes are from the leaf or the tobacco, not just the water.

5. Observe the cups over a week. Compare them to each other. Be sure to include the following ideas in your observations:
 - a. The color of each cup on the first day;
 - b. Changes in color over time;
 - c. The smell of each cup on the first day;
 - d. Changes in smell over time.

6. After completing the experiment, discuss the following questions in your groups:
 - a. Which cup changed the most? Which cup changed the least? Why?
 - b. What do you think the experiment tells you about the effect of cigarette smoking on the body?

7. Work with others in your group to develop conclusions about the experiment. Share your ideas with the class, then work with your class to develop class conclusions.

8. **CONGRATULATIONS! YOU HAVE JUST COMPLETED MISSION 5 OF *BRAIN POWER!***