

Floating on Air Activity

Purpose:

The purpose of this activity is to show how strong the lungs are and to have students involved in controlling their breathing.

Materials:

- One plastic quart bag per student (bags with a smooth edge with no seal work best)
- Two tables or desks that are the same size and shape (if using a desk, empty one as it will be used upside down)
- One large adult visitor that has agreed to be used in the demonstration (slacks required)

Procedure:

1. Invite an adult from your school to participate in this activity. This individual should be someone the students all know and respect (principal, PE teacher, etc.). If selecting a female, ask that slacks be worn. For the best effect with this demonstration, the larger the adult assistant, the better.

2. Prepare the tables (or desks) by clearing them off. Turn one upside down on top of the other so that the two flat surfaces are touching and even on the edges.

3. All of the students should participate, but only eight students will be participating at one time (4 if using a desk instead of a table). Group the students accordingly.

4. When it is his or her turn to be in the demonstration, give one quart bag to each student.

5. Students are evenly spaced around the table. The top table is tilted to allow each student to place their bag under the table

leaving about three inches of the bag with the open end, out from under the table.

6. Invite the adult volunteer to sit in the center of the upside down table.

7. Students make a hole to blow up the bag by gathering the open edge of the bag so it resembles the opening in a balloon. Stick a finger inside the opening to clear the hole for blowing.

8. On the teacher's count of three, all students in the demonstration blow as hard as possible into their bag and hold the breath as long as possible.

Results of the demonstration:

The top table will rise noticeably (2 to 3 inches) lifting the adult with it. When the air is released, the table will return to the original position.

Alternatives:

1. How few students can be used to accomplish the same results?
2. If an adult volunteer can't be found, lift encyclopedias or weights.
3. Keep track of how much weight can be lifted.
4. Have a contest between groups as to who can lift the most weight.