The How Healthy Is Your Lunch? activity helps students go beyond the more typical discussion about how healthy their lunches are for themselves to consider how healthy they are for the environment! When students see how much trash is generated by their leftover lunches, they will be motivated to use either reusable or recyclable materials instead. The activity also illustrates how the choices students make daily can have a positive effect on the environment.

Materials: Students will need two plastic bags, rubber gloves, two trash bins, one scale, and a list of materials that can be recycled in your area.

Safety First: Students should be supervised by an adult while doing this experiment, and anyone who sorts trash should wear gloves.

Getting It Across

Discuss the steps of this activity with the class before lunch. Make sure they are able to identify the recyclable items in their lunches. Have students write down their predictions about whether they will generate more trash or recyclables from their lunches before lunch. After the lunch items are collected and sorted, have students compare the weight of the trash bag with the recyclables bag. Students should be aware that every pound of trash sent to the landfill generates about .94 pounds of CO_2 . (For younger students you may wish to round this number up to 1 lb. of CO_2 .)

Experiment Tips

- Set up two special trash bins near the lunch area ahead of time.
- Make sure students know the difference between trash and recyclable items.
- If you do not have a large scale, you may want to have a student hold each bag while stepping on the scale and then subtract his/her weight.

Discussion Ideas

- **Predict:** Before doing the experiment, ask students to share their predictions as to whether the class lunches contain more disposable items (trash) or more recyclable items. Have them explain why they predict as they do.
- **Conclude:** After sorting the leftover items, ask students why they think the class has more trash, or more recyclables. Ask what can be done to reduce the amount of trash. (*Bring lunch in a reusable box or bag; bring drinks in a washable thermos; put food in reusable containers; use reusable utensils.)*
- Ask students how the amount of trash and recyclables directly affects the environment. (Trash goes into a landfill, and it takes energy to transport it there. The landfill grows and takes up space that could otherwise be a natural environment. New resources are needed to make new items to replace the ones thrown out. Unhealthy chemicals can leach from the trash into the underground water supply.) Direct students to consider the amount of CO₂ generated by the class's lunchbox trash. (Help them do the calculation with every pound of trash generating .94 lbs CO₂.)