

Become a Green Sleuth! (How green is YOUR school?)

Overview: In this project, students will conduct an investigative audit to determine how green their school is. By shedding light on any harmful or wasteful practices, this investigation is an effective first step towards improving the school's habits and reducing their impact on the environment.

Grades Applied: All.

Time Requirement: Should take place minimally during National Green Week with the possibility of becoming a longer-term project.

Costs: None.

Background (Basics): From the classroom to the cafeteria, the gymnasium to the guidance office, schools are responsible for a producing a great deal of waste. In many cases, when we compare schools to households and even some businesses, schools produce a highly disproportionate amount of waste per "resident" (student, teacher, employee) – generating well above the already astounding national average of 4.5 lbs of waste per person, per day. Fortunately, schools are well-positioned to attack this problem, as well as other eco-problems such as excess energy use and contribution to pollution. By identifying problems and creating policies to address them, schools have the unique ability to affect the habits of hundreds of individuals at once.

Learning Goals: To educate oneself and others on the "eco-footprint" of their school, and to find creative ways to improve (reduce) it.

Materials Suggested: Scrap paper or partially-used paper for documentation and record keeping.

Project Steps:

- **1. Learn** all about green-sleuthing from the National Resource Defense Council's online school tour at the link below. This interactive tool will help you identify eco-problems in your school and develop solutions to address them: Interactive School Tour
- **2. Choose a strategy:** There are many ways to determine how green your school is and how to go about taking steps to improve (reduce) its eco-footprint. Below are some helpful suggestions for how to proceed.

Possible Strategies

- Discuss what it means to be a "Green School," asking students what they can do to reduce waste, recycle more, and save energy and water
- Perform a Green Audit of your school, as outlined by the NRDC's online school tour.
- Interview custodians, teachers, school administrators, kitchen staff and fellow classmates to learn more about the school's habits and practices (e.g., waste/recycling practices, energy-saving steps)
- Hold a vote to choose an area or areas to focus on for improvement (e.g., recycling, water conservation)
- Submit Green Audit results and/or voting recommendations to principal or other school personnel and request a response
- Use a combination of the above strategies or create your own



3. Find your focus: Given the large number of areas in which schools can usually make improvements to their eco-footprint, it is often best to focus on one or two areas so as to not get overwhelmed. Below are some helpful suggestions for areas of focus, as well as guestions to consider for each.

Energy Usage

- What uses energy? How much energy is wasted daily?
- o Is your school heated by conventional or alternative energy (i.e., solar, wind, thermal)?
- Does your school use programmable thermostats?
- o To what extent are compact fluorescent light bulbs used?
- o Are windows in your school efficient at keeping in heat, or are they drafty?
- How often is "free energy" (i.e., the sun) used instead of classroom lights by opening the shades and windows?
- Are there "energy vampires" around the school (i.e., electronic devices and equipment that waste energy when not in use)?

Waste Reduction

- o How much of the schools trash is being recycled?
- o Are the following items being recycled or reused?
 - paper
 - ink cartridges
 - plastic
 - old office equipment/electronics
 - aluminum
 - batteries
 - food waste
 - miscellaneous
- What kinds of trays are being used in the cafeteria?
- o Is your teacher purchasing recycled paper?
- o Are tests and worksheets printed on both sides?

Water Conservation

- o Does your school have low-flow faucets?
- Does your school have low-flow or water-free toilets?
- Is gray water used to flush school toilets?
- If your school hires landscapers, are they using native or non-native plants to decorate the property?

• Toxics Reduction

- What kinds of cleaning products/other liquid or gas (aerosol) chemicals are being used?
- o How are these chemicals being disposed of?
- **4. Take Action!** Once you have chosen an area or areas to focus your efforts, reach out to peers, teachers, and school officials to educate them and change their habits. Take photos and videos of your efforts!
- **5. Report** on your success by going to www.nationalgreenweek.com! Use this link to report your results and upload photos, videos, and art created for your green-sleuthing campaign.



Assessment Questions:

Were people surprised to hear that many of their everyday habits were contributing to the school's eco-footprint?
Were people open to the idea of taking simple steps to change their habits in order to reduce the school's impact on the environment?
What was one surprising thing that you learned from this Green Team project?
What creative steps did you take to ensure that people were aware of the results of your green sleuthing? Did this awareness change anything? Try to be as specific as possible.

Resources:

Interactive School Tour
Student Zone: Green School Audit
Weekly Green Audit: School Cafeteria
Weekly Green Audit: School Waste Reduction