

projectgreenchallenge

pgc
2013

CURRICULUM

LESSON PLANS
FOR A
conscious
lifestyle

GREEN CLEAN

Introduction

Chlorine, ammonia, coal tar dyes and monoethanolamine are caustic, toxic and volatile organic compounds. Yet you can find these chemicals and more written in the small print of ingredient lists (if you can even find ingredient lists) on conventional cleaning supplies. You would never think that our everyday cleaning and laundry supplies would contain such toxic ingredients, but the reality is that over 80,000 chemicals are unregulated by the federal government. Individually, these chemicals are linked to asthma, reproductive harm, infertility, various cancers, and other serious health problems, and we don't even know what the health implications might be when they are used in combination - we're swimming in a veritable toxic soup! Manufacturers aren't required to disclose ingredients on labels, making it impossible for consumers to know what we are bringing into our living spaces.

Not only are conventional cleaning products bad for our health, they're also bad for the planet! Almost everything we put down our drains ends up in some sort of body of water, harming people, animal habitats, soil, ecosystems and all species.

The good news is that more and more companies are making cleaning products with non-toxic ingredients, eco-friendly materials, and biodegradable packaging! The Environmental Working Group is leading the way in research with their recently launched Household Cleaning Guide to help you make healthier cleaning product choices.

Resources

- [Pinterest Board](#)
- [Project Green Challenge 2011 Resources](#)
- [Project Green Challenge 2012 Resources](#)

Objectives

In today's lesson, students will:

- Learn to interpret labels on cleaning products to understand how the ingredients can impact health and the environment
- Compare conventional and conscious cleaning products in display boards.
- Compose a proposal to transition the cleaning products used in the school and create a petition to advocate for change among the student body

Materials Needed

- Computer lab
- Handout (included)

Lesson Plan

Start of Class: 3 minutes

Screen the trailer to the film

Unacceptable Levels

Then, ask the students for their reactions to the trailer. Did anything surprise them?

What ingredients are in your cleaning products?: 30 minutes

To begin today's lesson, have students bring in a picture of a cleaning product they use in their home and a written copy of the first five ingredients.

Then, have each student go online to visit ***EWG's Household Cleaning Guide***. Ask them to look up the product they selected, and the impact of each of the five ingredients do, including health and environmental implications of those ingredients. Then, ask them to use the same resource to find a better alternative to the product.

Taking It One Step Further: 30 minutes

Using the handouts as a guide, students will work together to create a conventional-to-conscious guidebook with everyday cleaning products. In digital form, students will include an image of the conventional product and the conscious product, as well as facts about them. Photos and information should be arranged creatively and the finished pages can be collected together to form the class's Conventional-to-Conscious Cleaning Product Guidebook. Once the students have finished their pages, they can present them to the class and the final book can be shared with families, other teachers, school administration and community members.

DIY Cleaning Activity: 50 minutes

Did you know that you can make your own cleaning products from healthy ingredients found in your

kitchen cupboards? With a shopping list that includes things such as white vinegar, lemons, borax, essential oils, baking soda, citrus peels, or water, you can tackle any problem! Look up a list of possible recipes to make your own cleaning products for the classroom. A great resource to use is the ***Teens Turning Green DIY recipes guide***. In groups, the students will make a product from the recipe list, present it to the class, explain its purpose, and how much it cost to make compared to the conventional counterpart.

Assessment/Checks for Understanding: 30 minutes

In the concluding activity in this lesson, students will find out what cleaning products are used in their schools, and mobilize for change if they are made with toxic or hazardous chemicals. Ask students to reach out to either the school administration or maintenance department, explaining what they are doing and requesting a list of all the cleaning products used in the school. Then, divide the list of products up between students or small groups. The students will utilize the skills they learned in the introductory activity to research the products and find greener alternatives if the current product has concerning ingredients. The students will also investigate the prices of the conventional vs. the conscious cleaning products with the intent of matching prices as closely as possible.

Once the students have assembled a list of potential products to help transition to a cleaner and less-toxic school, it is time to get the word out. The students will create flyers or posters to advertise their goals and the importance of green cleaning products. They will request approval to set up an informational table and petition, which can be run during lunch hour, or before or after school. This empowers the students to take on the role of the teacher. Once they have gathered signatures and raised awareness about the issue, the students will present it to the school administration.

Green Clean Handout

Homework: Find a cleaning product around your house.

1. What is the name of the product?

2. What is the purpose of the product?

3. List the first five ingredients?

4. What grade did the product get? (A-F)

Green Clean Handout cont.

5. Chart the five ingredients of the product.

Ingredient	EWG Rating	Concerns

6. If your product received a grade of C, D, or F, it's your chance to select an alternative! On the same EWG website, find an alternative to the product you selected. Look at it's rating. How is this product different?

7. Would you consider purchasing this new product? Why or why not?