Checklist of Things To Do

What’s Hazardous in the Home?
✔ Send home the Family Notification Letter (see 4 - 6 Hazardous Homes?)
✔ Order green product catalogs. See the Resource Section for a listing of where to obtain some catalogs.
✔ A useful resource for this activity is the Household Hazardous Waste Wheel. For ordering information, see The Environmental Hazardous Management Institute in the Resource Section (Environmental and HHW Management Organizations).

Hazardous Characteristics
✔ Set up Student Learning Stations.
✔ It is useful to have a chemical dictionary in the classroom.

Pondering Percolation
✔ Collect soil samples for each small group. Each group needs a sample of topsoil, sandy soil and clay soil, NOTE: lumpy clay soil should be avoided. Make sure these samples are dry.

Toxicity: A Relative Term
✔ This lesson contains two long-term experiments. Teachers must allow approximately two weeks to germinate lima bean plants (eight plants per small group). The plants need to grow to be 3” - 5” in height before conducting the experiment.
✔ These experiments require two to three weeks to complete. You may want to adapt this activity so that it requires less time.

The Battle of Baking Soda
✔ Collect the items listed in the Materials Section.
✔ Collect sample cleaning products used in the school.
  e.g.: window cleaner, furniture polish, general cleaner
7-8: What’s Hazardous in the Home?

Subjects
Social Studies, Science, Language Arts, Mathematics, Practical Skills

Skills
Analyzing, evaluating, gathering data, interpreting

Materials
“Household Hazardous Product Inventory” sheet, Family Notification Letter (see 4 - 6 Hazardous Homes?), green product catalogs

Time
One and a half class periods, homework

Vocabulary
Trade secrecy, active, inert

Related Teaching Toxics Activities
7-8 What is a Hazardous Substance?
4 - 6 Hazardous Homes?
4 - 6 Looking at Labels
9 - 12 Assessing Awareness
9 - 12 Hazardous Materials in Your School

Concept
Products containing hazardous substances are commonly found in the home.

Objective
Students will become familiar with the types and quantities of hazardous products through conducting a home inventory.

Background
See Information Section, pages 120, 127, 139.

Although hazardous product labels are regulated, they do not provide the consumer with enough information to make a fully informed decision. For example, product manufacturers may be exempt from releasing the exact identity of some chemical ingredients, if doing so might cause them economic loss (referred to as ‘trade secrets’). In addition, manufacturers often use generic terms, rather than revealing the specific chemical identity of ingredients. For example, petroleum distillates or organic solvents are actually categories of chemicals and can represent any one of hundreds of chemicals. Generic information is not sufficient to determine how hazardous a product actually is.

Procedures and Activities
Introduction to Hazardous Products
- List the five hazardous product categories on the board (automotive, cleaning, paints, pesticides and miscellaneous.) In small groups, have students brainstorm a list of household hazardous products included in each category.
- Ask students to put the products in order from the most common to the least common and predict what is the most common hazardous product in their homes.

Home Inventory
- Discuss the Household Hazardous Product Inventory sheet on the following page and review specific label terms (e.g.: active vs. inert ingredient, generic ingredient terms.)
- Have students conduct the household inventory with the supervision of an adult family member. Have students note what information is missing from the products they inventory, as well as what information is given.
- After the inventories are complete, have student groups discuss the questions below and design a way to visually represent their data in an organized way.
Suggested discussion topics for the small groups:

- What are the most common types of hazardous products?
- What information on the label is most frequently excluded?
- What are the most common hazardous product ingredients?
- What are the most frequently used products?
- What percentage of hazardous products are being stored according to their directions?
- Are consumer information phone numbers always listed?
- If students were able to call, were they satisfied with the information they received?
- From your inventory results, what can you conclude about how we use hazardous products?
- How would you describe your reactions to the survey?
- How do your predictions compare to what you actually found?
- Can this data be used to infer what hazardous products are used in the entire community? Why or why not?

Have student groups present their findings to the class.

Managing What We Use

- From the inventory list, have students highlight which hazardous products they personally use and ask them to research less hazardous "green" products on the web. If no alternative exists, have students research proper use, storage and disposal of the hazardous product. (A useful resource for this activity is the Household Hazardous Waste Wheel. For ordering information, see The Environmental Hazardous Management Institute in the Resource Section.)

Extensions

- Discuss the Federal Hazardous Substances Act (see 4 - 6 Hazardous Homes). Have students survey the stores in their communities to see if the labels are where they should be. Students could survey shoppers to see if the shoppers notice the labels. In light of their surveys, have students develop a written evaluation of the law.

- Call your local waste management agency or department to find out if they have conducted a survey of household hazardous waste generation. If so, compare your results.

- Analyze the different advertising techniques used to sell green products. What audience is being targeted? How can you make sure the product claims are true?
# Household Hazardous Product Inventory

Families: We are asking your child to complete this activity with you for homework.

## Directions:
1. Complete the inventory with an adult family member.
2. Do not open any of the containers. All the information you need is on the product label.
3. Look in the rooms where hazardous products are stored and find out what types of hazardous products your family uses. If you find the product, put a check in the space next to the item. Count the number of containers and write the number next to the item.

## Kitchen
- [ ] Oven Cleaner
- [ ] Floor Cleaner/Wax
- [ ] Scouring Cleanser
- [ ] Bleach
- [ ] Ammonia
- [ ] Drain Cleaner

List other products you found:

## Bathroom
- [ ] Disinfectant
- [ ] Drain Opener
- [ ] Toilet Cleaner
- [ ] Tile Cleaner
- [ ] Air Freshener
- [ ] Fingernail Polish/Remover

List other products you found:

## Other Supply Closets
- [ ] Furniture Polish
- [ ] Spot Remover
- [ ] Carpet Cleaner

List other products you found:

## Garage/Work Room
- [ ] Glues
- [ ] Paint/Stains
- [ ] Paint Thinner
- [ ] Motor Oil
- [ ] Antifreeze
- [ ] Pesticides
- [ ] Gasoline

List other products you found: