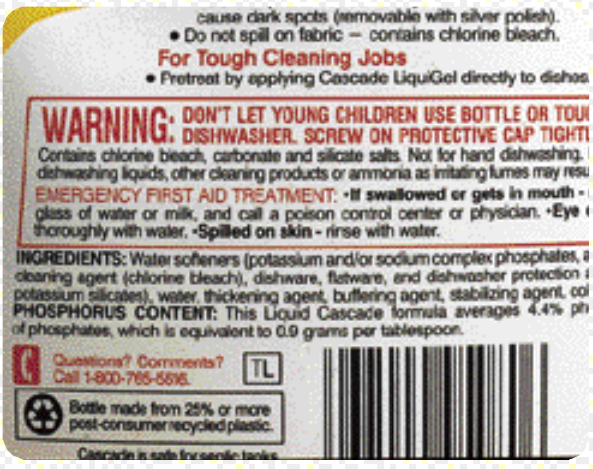
Developing a Chemistry Newsletter



Background

Many of the chemicals in your school laboratory are hazardous. Some are corrosive, some are flammable, and some are poisonous. Many exhibit these properties when they are combined. You can work safely with these chemicals, as long as you treat them with care and respect, observe proper safety precautions, and follow the directions that are given by your teacher and this textbook.

Did you know that many of the chemical products in your home are hazardous, too? For example, common household bleach, when used as directed, is safe for disinfecting and whitening clothing. Hazard labels on bleaching products, however, warn against mixing bleach with acids, household ammonia, or products that contain these chemicals. Bleach, when combined with acids, produces toxic chlorine gas. The products of combining bleach with ammonia are explosive.

Most homes contain numerous chemical products, ranging from cleaners and disinfectants, to fertilizers and fuels. All potentially hazardous products have a warning on their containers or on paper inserts in their packaging. Many, but not all, have a list of the chemicals they contain. Some hazardous products advise users only to keep them away from children and pets.

How much do you know about the safe use of chemical products? Would you know what to do if an accidental spill occurred? Would the members of your family, or people in your community, know what to do?

Challenge

Design, produce, and distribute a newsletter to inform your community about the safe use of common chemical products. Include the potential hazards of these products to living things and the environment. Also include emergency procedures to follow if an accident occurred.

Materials

Select a medium for your newsletter, such as a traditional paper newsletter or an electronic version for the Internet. For a traditional newsletter, you will need to decide on methods of production and distribution. For an electronic version, you will need to use computer hardware and software.

Assessment

After you complete this project:

- Assess the success of your project based on how similar the final project is to your action plan.
- Assess your project based on how clearly the chemistry concepts and safety recommendations are conveyed.
- Assess your project using the rubric designed in class.

Design Criteria

A As a class, develop a rubic listing criteria for assessing the newsletters. For example, one criterion may involve a newsletter's effectiveness in altering the behaviour of its readers. You may want to develop different criteria for traditional and electronic newsletters.

B Your newsletter must be factual, easy to read for a wide variety of audiences, and educational.

Action Plan

1 The following items must be part of your newsletter:
- examples of household chemical products and their uses
- hazards associated with each chemical product
- suggestions to encourage safe and responsible use
- environmental considerations for the disposal of the chemical products
- alternative products (if any), and hazards (if any) associated with these alternatives
- an interview with a professional who researches, develops, or works with household chemical products

2 Develop detailed steps to research, plan, and produce your newsletter. Include deadlines for completion and specific roles for the members of your group (for example, editor, writers, artists, and designers).

Evaluate

Present your completed newsletter to your class. Hold a focus group session to evaluate the content and impact of your newsletter. The focus group could include students from other classes, parents and relatives, and members of the community.