

Green Cleaners



INTRODUCTION

Green cleaners refers to using methods and products with environmentally friendly ingredients and procedures that preserve human health and environmental quality. As the association of hazardous chemicals with health is becoming clearer, demand of safer materials which are environmental friendly and do not have any adverse health impact is increasing.

The lesson encourages exploratory research and synthesis of learning from around the world.

Objectives:

Students will be able to

- survey the immediate community to ascertain the use of hazardous/ safer household products.
- identifying safer substitutes for common hazardous household products.
- popularise the use of these alternatives, by first implementing their use in schools and promoting awareness of the same amongst students and through them to parents.
- communicate learnings through an article/brochure.

YRE steps: Investigate, Research Solution, Report, Disseminate

Curriculum Linkage: Science/ Environmental Studies/Social Science



11-14
Years

Time required/ Duration:

- **Classroom Session 1:** 45 minutes for the teacher to do a background introduction on household hazardous wastes and why we need to be careful while handling and disposing these.
- **Home Assignment 1:** Five hours over a week for the community survey and internet search.
- **Classroom Session 2:** 45 minutes for group presentations and wrap up session.
- **Home Assignment 2:** One week for trying out some of the household greener products.
- **Classroom Session 3:** 90 minutes for developing a brochure.

Resources Required:

- Resource 1: Hazardous waste products and labels powerpoint presentation
- Resource 2: Hazardous waste symbols reference chart - to understand and interpret reading of labels
- Community Hazardous waste - survey sheet
- Internet
- Writing materials



Activity

Classroom session 1

- Start with a discussion introducing students to the different types of products consumed at home for various requirements including cleaning, personal care, pest control to name a few and mention that a range of products are available in the market for these functions.
- Lead the discussion so that students understand that some of these products are potentially hazardous and appropriate care needs to be taken while handling and disposing them.
- Discuss the home assignment.

Home Assignment 1

- Guide the students to use the community hazardous waste survey sheet to assess the different types of chemicals people are using in their households and if any of them are using less harmful alternatives to these hazardous products.
- Suggest that each student should survey two households - one could be their own.
- Encourage students to undertake an internet based search or interact with individuals who could teach them how to make some alternatives instead of some of the hazardous chemicals presently used.
- Allocate one week time to the students to undertake these surveys and internet based research.

Classroom session 2

- Ask students to summarise their findings in the class.
- Discuss the findings.
- Ascertain as part of the student survey, if students came across some innovative products which could be used instead of household hazardous products.

Home Assignment 2

- Ask students to make some of the alternatives identified in the research for use at school and homes.
- One week should be provided to the students for the same.

Activity

Classroom session

- Ask students to create an A-4 size brochure explaining the demerits of hazardous household chemicals, mentioning the benefits of alternative green products and popularise the use of alternative products that they researched.
- Share and disseminate the brochure using social media, school bulletin board and other community spaces.

Evaluation:

Evaluate the brochure developed by the students for the effectiveness of communicating the following

- The demerits of hazardous waste
- The benefits of alternative products
- Promotion of their product
- Photographs or other elements they would have made use for effective communication