A King County *Hazards on the Homefront* Mini-Grant Project

**Green Cleaning Products Show**  
**Project Outline**  
*Developed by Carlie Jonas, McKnight Middle School, Renton, Washington*

In the second week of January, the entire 8th grade class will be putting on a green cleaning products show for the public. You will be responsible for educating the public about household hazardous products and their safer alternatives.

In groups of 3-4, you will design an experiment and present findings for one of the following hazardous products and its safer alternative:

- kitchen disinfectants
- metal cleaners (copper cleaner)
- tub and sink cleaner
- furniture polish
- window and mirror cleaner
- oven cleaner
- drain cleaner
- toilet bowl cleaners
- all-purpose cleaner (for linoleum, tile and woodwork)
- slug bait

**Project Outline**

1. Design an experiment to compare the effectiveness of a hazardous product and a safer alternative. Use the scientific method outlined in the Lab Report format we use in class. You will design your experiment in class and will conduct the experiment at home. Your experiment will be conducted over several weeks.

2. Do a cost-analysis. Calculate the cost of the hazardous product and the safer alternative. You will get more information later on exactly how to do a cost-analysis.

3. In the second week of January, we will have the Green Cleaning Products show where you will display your results. On your poster and display, you need to:

   a) Answer the following questions:
      - What is the purpose of the product?
      - How does it hurt people or the environment?
      - What are the alternatives?

   b) Write everything that is on your lab report (make it easy to read; emphasis should be placed on data tables and graphs).
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c) Include your cost analysis.

d) Display the hazardous product and safer alternative at the show so that visitors may see and/or test the product themselves. Groups that set up a system where visitors can test the product will receive bonus points.

e) Make copies of the recipe of the safer alternative to hand out at the Green Cleaning Products Show.

**Project Timeline**

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>December 7th</td>
<td>Experiment Proposal Due</td>
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<td>December 8th - January 3rd</td>
<td>Conduct Experiment</td>
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<td>January 6th</td>
<td>Poster and Display Due</td>
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<td>January 9th</td>
<td>Present Findings to Class</td>
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<td>January 10th</td>
<td>Green Cleaning Products Show</td>
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**Extra credit**

Individuals may get up to 50 extra credit points for doing one of the following for the green cleaning products show:

- Write letters for existing newsletters (i.e. local newspaper, PTA newsletter, school newsletter) to inform the public about household hazardous products and to advertise the Green Cleaning Products Show.
- Make a map of recycling and hazardous waste collection locations of the local area.
- Make a poster/display to inform the public about safe ways to deal with pests in the home.
- Make a poster/display to inform the public about the effects of lawn pesticide run-off and how to reduce the need for pesticides.
- Make a poster/display to inform the public about the dangers of oil-based paint and solvents and their safer alternatives.
- Make a poster/display to inform the public about the dangerous automotive products and their safer alternatives.
- Write a song/rap that informs people about the problem of household hazardous products. Include what can be done to resolve the problems. Share the song with your class and post it at the show.
- You will also get extra credit for every person you bring to the green cleaning show, including yourself.