Teva Learning Center

307 Seventh Avenue, Suite 900, New York, NY 10001

Synagogue Energy Audit Scavenger Hunt

Age: 4th grade and up.

Duration: 40 minutes to 1 hour

Goal: To learn practical solutions to energy reduction; to begin analyzing the energy use practices of the synagogue. To discuss and develop a class-led project to help the synagogue reduce its environmental impact/footprint.

Materials: Audit sheets (one set per team); Pencils or pens; Compact fluorescent light bulb (CFL)

Preparation: Before the activity, make sure you read through and filled out the sheet yourself. Some of the questions ask for specific information about your building and technological choices. You'll need to understand each question and know the correct answers. If you have a large building, you may want to limit the scavenger hunt to certain areas, or assign each group a different section of the scavenger hunt or of the building.

In order to have these answers you may need to consult with the building maintenance supervisor for their advice and help. It would also be helpful to advise other groups and employees using the building of the scavenger hunt in advance.

Procedure:

- 1. Divide the students into groups of three or four. Give each group an audit scavenger hunt sheet(s).
- 2. Review the audit sheets together, explaining each section and answering any questions.
- 3. Students have 15-20 minutes to complete as much of the scavenger hunt as possible.
- 4. Share results from the activity and discuss areas where improvements can be made at the synagogue and in our personal lives.

Discussion:

Discuss taking steps as a class to support the greening synagogues initiative. Next week you will begin a class campaign to help "green" your synagogue. Right now, as a group, chose one activity (such as closing windows if the heat is on, turning down the thermostat, turning off lights in empty rooms, or changing an incandescent bulb for a compact fluorescent). This will be your first act of *tikkun* (repair), setting the stage for next week's discussion of an eco-mitzvah class project.

To Do at Home: Ask students to sit with their families at a computer and compute their family's ecological footprint. www.earthday.net/footprint (or they can google "ecological footprint" and follow the first link to the Earth Day Network.)

Do you like what you see in this curriculum module? Teva's educators are available to plan and conduct programs and teacher training. To find out more, call 212-807-6376 or email teva@tevacenter.org.



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Instructions: This Scavenger Hunt involves a combination of finding certain items, performing challenges, and answering questions. Read all the questions in each category, then go search! For each completed task, you will receive points. (Only correct answers win points.) Make sure you read carefully, record any information that is asked for on the lines provided! Be creative and have fun!

1. Doors and Windows A. Count the number of doors and windows in the entire building. How many Doors How many Windows _____ B. Were any of the windows or doors open allowing heat to escape? How many Doors Where? Where? Where? C. Did any of the closed doors leading to the outside have cracks near the floor, allowing air to flow out? How many Doors _____ How many Where? _____ Did you know that the amount of heat lost through a quarter-inch crack along a 3-foot door costs more than 20 gallons of fuel oil to reproduce? Not only is this a waste of money, but it adds to the amount of carbon dioxide in the atmosphere which is contributing to The Greenhouse Effect. Every day, light from the sun reaches the earth, turns into heat, and reflects back into outer space. Certain "greenhouse" gases in our atmosphere, like carbon dioxide, can trap the heat that is reflected – like a greenhouse. When there are too many greenhouse gases in our atmosphere, too much heat stay trapped on Earth. All of this trapped heat causes Global Climate Change. 2. Lights A. Count the number of light bulbs there are in the building and what types of lights are in use. Total Incandescent Fluorescent (long tubes) Compact Fluorescent _____ L.E.D Halogen Did you know that lighting makes up about 25% of the electricity Americans use? If 1,000 of us replaced four incandescent light bulbs in our house with compact fluorescent bulbs, we could prevent five million pounds of carbon dioxide from entering the atmosphere! Not only that, but we'd also reduce our electricity bills by more than \$100,000 over the lives of those bulbs. B. List rooms where lights were left on and don't need to be. Turn them off!

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3. Interview Find the building maintenance supervisor and ask the following questions
A. What type of energy is used for the synagogue's heating?
B. What type of energy is used for building electrical needs? Does the synagogue use renewable energy?
C. List three measures already in place to reduce energy usage: 1 2 3
D. What type of glass is in use on the doors and windows, how many panes (layers of glass) does it have?
4. Personal List the number of members of the group that fall into each category. Please be honest your answer will not be judged.
A. Transportation: How did you get to the synagogue today Car with one or two students Carpool with three or more students Public Transportation (bus or train) Bicycle or Walk
B. Electricity Conservation: I remember to turn off my lights and appliances such as TV, computer screens, etc., when I leave a room Never 25% 50% All the time

Kol Hakavod! Great Job!

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