



## Energy Patrol

**Action:** Learning how to conserve energy in your school

**Materials:**

- An item to identify the energy patrol team, e.g. an arm band, hat, vest or badge

**Suitable time for project:**

Anytime of the year is suitable to begin an energy patrol; however starting earlier in the school year provides enough time for targeted campaigns and a final analysis.

**Time commitment:**

- Planning: Two to three meetings
- Creation of media and materials for patrol: One to two sessions
- Baseline data collection: Three to four sessions
- Implementation of changes to energy conservation in your school: One week of lunches to educate other students/classes
- Maintenance/ monitoring: Two to three sessions per week

**Background:**

- A large portion of the energy we use at school and home comes from non-renewable energy sources such as coal, oil, and natural gas.
- Burning these fuels creates air pollution and contributes to climate change.
- The objective of this project is to form a patrol that will inspect the school to identify where energy can be conserved.

**Gives students the opportunity to:**

- Explore the concept of energy, including renewable vs. non-renewable
- Examine the ways in which they contribute to energy consumption
- Participate in energy-saving actions
- Lead other students to reduce energy usage

**Fast facts:**

- Dimmer and timer switches are a great way to start saving energy.
- Replace artificial lights with newer energy efficient bulbs.
- The most frequently used lights in a house are: kitchen lights, living room floor lamps, bathroom vanities, and outdoor porch lights.
- Lighter-coloured walls reflect light better, reducing the need for artificial light.
- Skylights, curtain-free windows and buildings or windows oriented for optimum sun exposure drastically reduce the need for artificial light.
- If 1,000 computers were left on continuously, the electricity consumed would cost over \$100,000 per year.
- Most laundry detergents and soaps are formulated for cold water and do not need heat to effectively clean the clothes.
- Lights left on at night, particularly in schools and tall buildings, lead to increased bird deaths.



### **Getting started:**

- Discuss with students what energy is, where it comes from and why it is important to conserve and use renewable sources.
- Brainstorm how energy is wasted in your school, e.g. computers left on, doors propped open, etc.
- Design an energy map of your school to see what areas use the most energy. This will likely involve the students exploring the school as a group over a few days or weeks.
- Ask for help in determining energy consumption at your school. The board or custodian should have information about overall energy consumption.
- Learn how to read energy meters at school and track how the energy patrol changes the overall consumption (this will likely require the help of the custodian).
- Identify ways energy could be saved and find other markers (e.g. number of classrooms with their lights left on at recess, lunch or the end of the day) to gauge the success of your patrol.
- Have an energy patrol warning slip to issue or a reminder poster for classrooms leave lights or computers on or prop doors open.
- Create an inspection schedule to be done at regular intervals throughout the school year.

### **Maintaining interest in the project:**

- Provide updates about the patrol in school publications and during school announcements
- Create energy conservation labels to place in classrooms (over light switches, computer monitors, etc.).
- Reward classrooms who consistently remember to turn out lights, computers and fans.
- Have a different focus for each week or month of the campaign, e.g. September could be the month to remind everyone to turn computers off, October could be lights, November could be curtains pulled closed, etc.
- Have classrooms compete against each other.

### **Helpful hints:**

- Ensure the entire school is aware of the purpose of the patrol and how they can participate.
- Targeted campaigns throughout the year are a great way to ensure visibility. Try linking the energy conservation campaigns in the school to larger events.
- Ensure the energy patrol understands why they are doing the campaign, e.g. provide a short hand-out (be sure to reuse or use recycled paper!) that patrol members can give to other teachers, students or parents when asked.