



Draft-proofing **Energy Audit**

When the school furnace or boiler is heating the inside of the school, cold air entering the building through open doors and cracks forces the warm air outside. Most heat escapes through open doors and through cracks around doors and windows. By repairing old or damaged **weather stripping** and replacing **caulking**, the school's heating bill can be greatly reduced. The building will also be more comfortable.

For this audit, every member of your group will need a **draft detector**. One way to make a draft detector is to tape a piece of toilet tissue or facial tissue to a pencil, so 10 cm of tissue hangs off the pencil. **NOTE:** Incense works better to create a thin line of smoke that will move in a draft, but because of the scent, you may not be able to use incense in a school setting.

Method: Hold the draft detector in several locations around the edges of entrance doors and windows to see if drafts are entering the school. The tissue will wave when touched by a draft. Check at the various joints in window and door frames. Be careful not to be misled by drafts from nearby heating vents or air currents caused by students moving. Record the location of drafts so that you can share this information with your teacher and the caretaker and repairs can be made.

Weather stripping: Weather stripping seals openings like doors and windows from drafts and heat loss. It is often made of foam or vinyl and creates a seal by squishing against both the door and frame (or window and frame) when the door or window is closed. Damaged or missing weather stripping allow drafts to enter the building, and heat to be lost.

Caulking: Caulking seals joins around windows and door frames. It is a pliable material that goes on as a thick liquid, and sets in place to seal cracks or joins. If it becomes brittle or breaks off, the gap it leaves allow drafts to enter the building, and heat to be lost.

Draft Detector: Make your draft detector by taping one edge of a piece of tissue to a long pencil. The tissue should hang from the pencil by about 10 cm. Test it by blowing on the tissue- it should move when you blow very gently on it, just like the draft will move it.



Use the chart below, or create your own to represent the doors and windows in your school.

Location	Drafts (yes/no)	Notes - specific window location and reason for draft: e.g. weather stripping damaged, door does not fit.
Entrance Doors:		
Main		
Boot Room Jr.		
Gym		
Windows:		
Room #		
Room #		