

Draft-O-Meter

Grades: K-4, 5-8

Topic: Energy Efficiency and Conservation

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Owner: Alliance to Save Energy

DRAFT-O-METER

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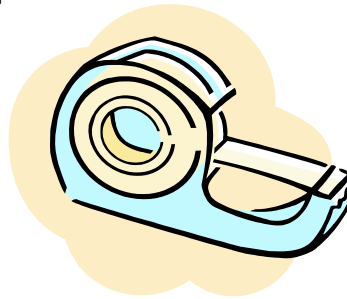
Urbita Elementary School, San Bernardino, CA

Adapted from the Tennessee Valley Authority

Objective: Students will:

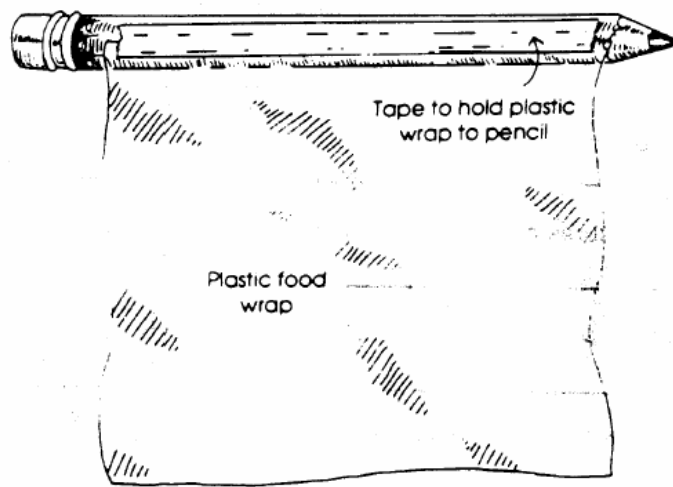
1. Learn an easy technique to measure the presence of drafts in their homes and classrooms.
2. In a follow-up exercise, students can create draft guards (see Worm Warmers lesson).

Materials: Pencil, tape, plastic food wrap



PROCEDURE

1. Cut a 12cm by 25cm strip of plastic wrap.
2. Tape the shorter edge of the wrap to a pencil and let the rest hang freely.
3. Blow plastic wrap gently and note how sensitive the wrap is to air movement. Drafts mean that air is leaking into or out of a building. This means either a loss of heat in winter or a loss of air conditioning in summer.



FOLLOW UP

- A. Students can complete the following "Home Draft Checklist" to assess where drafts are in their homes.
- B. Have students complete the "Worm Warmers" activity to guard against the drafts they detected in this exercise.

HOME DRAFT CHECKLIST

Check each of the locations where drafts are likely. Where your draft-o-meter detects drafts, rate them by checking the right column. Rate drafts as 1 (strong), 2 (moderate), or 3 (weak). If there is no draft, check the "no draft" column. If your home does not have a listed location, just draw a line through that location.

DRAFT LOCATIONS	NO DRAFT	DRAFT RATINGS		
		1	2	3
1. Exhaust fans in bathrooms and kitchens				
2. Dampers in fireplaces and woodstoves				
3. Doors				
4. Windows				
5. Light fixtures attached to walls and ceilings				
6. Attic door				
7. Window air-conditioning units left in place in winter				
8. Mail chutes or slots in walls or doors				
9. Cracks in the foundation of the house or holes where pipes pass through				
10. Where porches and steps meet the house				