

Draft Detectives

First Grade

Activity: 1

Time: 1 Class Period

General Description

Students will search the school for drafts and propose solutions to fix the loss of energy.

Objectives

Students will relate the waste of energy by drafts to the need for conservation; identifying problem areas of the school and propose solutions.

Arizona State Standards

SC01 S1C1 PO1 Compare common objects using multiple senses

SC01 S1C2 PO1 Demonstrate safe behavior and appropriate procedures (e.g., use of instruments, materials, organisms) in all science inquiry

SC01 S1C2 PO2 Participate in guided investigations in life, physical, and Earth and space sciences

SC01 S1C2 PO4 Record data from guided investigations in an organized and appropriate format (e.g., lab book, log, notebook, chart paper)

SC01 S1C4 PO1 Communicate the results of an investigation using pictures, graphs, models, and/or words

SC01 S6C1 PO5 Identify ways to conserve natural resources (e.g., reduce, reuse, recycle, and find alternatives)

W01 S1C1 PO1 Generate ideas through prewriting activities (e.g., brainstorming, webbing, drawing, writer's notebook, group discussion)

W01 S1C1 PO2 Draw a picture or storyboard about ideas generated

M01 S2C1 PO2 Make a simple pictograph or tally chart with appropriate labels from organized data

LS F2. Give and follow multiple-step directions

Teacher Background

Explain to students what drafts are, model how to find a draft and allow students to identify them in groups. The class can discuss what it means when dirt collects outside of windows and doors. After discovering the drafts, students can brainstorm solutions. One solution might be to make draft stoppers by filling cloth tubes or old socks with kitty litter. The students can then decorate the draft stoppers. Have the students come up with additional ways in which they can prevent drafts.

Materials (per student)

Pencils

Plastic food wrap

Tape

Procedure/Exploration

1. Create “draft detectors”
 - a. Use the tape to attach the food wrap to the pencil.
 - b. Blow gently on the wrap to observe how it moves.
2. Test windows and doors in the classroom and around the school by holding your draft detector near the edges of doors and windows.
3. Record the locations where leaks were found.
4. Have students brainstorm solutions.
5. Create some of the solutions (or make draft stoppers described above).