



Draft Detectives

Create your own draft catchers!

Activity Guide

Description: In this two part activity visitors will become draft detectives by constructing their own draft catchers to detect drafts around windows or doors. Next they will make draft stoppers to reduce air flow and conserve energy.

Audience: Hands-on activity for families and kids ages 5 and up

Length: 15-20 minutes

Learning Objective

Visitors will learn the importance of reducing drafts and preventing heat or cold air loss. Visitors will also create tools to reduce the amount of energy needed to heat or cool their homes.

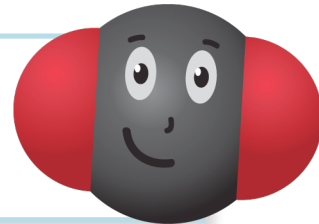
Climate Connection

When people heat their houses in the winter or cool them in the summer, they typically use energy from fossil fuels. By detecting and stopping drafts and insulating our homes and buildings we can conserve the use of fossil fuels while also saving on our energy costs!

Insulation is used to maximize the efficiency of heating and cooling systems. Materials such as fiberglass and rock wool are used to line attics, windows, doors and other areas where air flow is common. In order to keep houses warm in the winter and cool in the summer people have come up with some pretty creative materials to use as insulation. They use newspapers, corncobs or even recycled blue jeans!

Did you know?

Only 20% of homes built before 1980 are well insulated!



Materials

For each draft catcher

- 1 paint stirrer (a pencil, popsicle stick or skewer may also be used)
- 1 piece of tissue paper
- Tape, glue stick, or other adhesive
- Markers, for decoration

For each draft stopper

- 2 pieces of fabric, 6x38 inches
- Sewing machine with thread
- Dry lentils or rice for filling
- A small scooper or funnel for filling
- Wiggly eyes, fabric glue and other fun items to decorate your stopper!

Set up

- Set up two tables (one for draft catcher and one for draft stopper) with materials needed for each activity.
- Prepare fabric for draft stoppers. Sew two pieces of fabric, 6 x 38 inches leaving an opening on the narrow side at the top.

Program Delivery

PART I: CREATE A DRAFT CATCHER!

Have you ever noticed that it can be cooler near doors or windows in the winter?

This is because of drafts, or areas where air is flowing. We want to catch and stop drafts because these areas waste the heat we use to warm our homes.

What is a draft catcher?

To avoid wasting energy in our homes we must first find out where the heat loss is coming from! We can do this with a draft catcher, a simple measuring tool that will flutter when a breeze or draft is present. After detecting the draft, we should insulate, or stop the air flow around the areas of heat loss.

[Ask visitors to decorate their paint stirrer any way they'd like. Drawing on them with markers can really make these catchers snazzy!]



[Attach the piece of tissue paper to the stirrer using glue or tape]

[Invite visitors to explore their house or school to find drafts. When the catcher flutters, a draft may be present.]

PART II: CREATE A DRAFT STOPPER!

What is a draft stopper?

After detecting a draft, we should insulate areas of heat loss. Most heat loss occurs in cracks under the doors and windows. We can stop this loss of heat by making a draft stopper, an insulation barrier that we can place under leaky doors and windows.

[Fill the draft stopper fabric with dry lentils or rice (pour using a container with spout or a funnel), leaving a little room to sew the top pieces together. After sewing the top together they can decorate their draft stoppers!]



Discussion Questions:

Where do you think you will be able to find some drafts with your draft catcher?
Besides using a draft catcher, what are other ways of conserving energy in our homes?

Credits

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