

Heatwave station Instructions

Materials:

Cardboard squares paper bags foam sheets Light construction paper Dark construction paper Mesh/ Screen material Foil Craft sticks Coffee filters Mirror tiles mirror plates	Heat lamp hand warmers thermometers thermal leak detector tape scissors 2+ tubs wax pieces/broken crayons
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Arrange two tables with the building supplies and instructions. Set up the heat lamp over a tub with the blow dryer and hand-warmers nearby. Arrange the testing tools on another table- thermometers, leak detector and crayon pieces. Test the heat lamp.

Students will make a structure or surface for their cat- this can be as simple as putting the cat under a piece of paper or as complex as a little house.

Test how insulating the structures and materials are through different methods: placing under the heat lamp, using the hand warmers (they can go inside, sit on top, bottom, etc.) blowing with the dryer. Allow students to be creative and run their tests but keep a close eye on the heat lamp for safety! The lamp should be left in place and students will have to take turns measuring underneath it.

Encourage the students to use the thermometers and leak detector to observe temperature changes, and try again using different materials or a different shape. Be patient and share supplies!