

Model House Challenge



Testing the Model House



After experiencing the exhibits about Conduction (red), Convection (blue), or Radiation (yellow), expert pairs of participants shared their expertise and worked together to solve the Model House Challenge as a team.

The Model House is very simple...only the window, one wall, and ceiling can be modified. The other three walls do not come apart. The heat source for the house is a simple 'furnace' beneath the main floor, where there is a light bulb and a small fan. Inside the house is a temperature probe connected to a wire that comes outside the house so the team can monitor the temperature inside.

The following materials are provided for each team to modify the house, but the team may only choose 3 of the 5 things provided:

1. Window with double pane and low e film
2. Wall Insulation
3. Ceiling Insulation
4. Caulking (blue tape)
5. Outer sheathing with reflective surface

For an inside look at the Model House:

<https://www.youtube.com/watch?v=MsGn5peVsJY&list=UUvA1JvEmgV2R8066g7y3sBA>