

Heat Transfer *No Way!* Activity—Day 2 Instructions

Day 2 Materials

- Day 2 Slideshow (*to show to the class*)
- “Snowman Story Resources” (*one set for each group of four students*)
- “Snowman Story: Checking Claims” worksheets (*two sets for each group of four students*)
- Advertisement: “Zippy Pop!” (*one copy per student— for homework*)
- “Zippy Pop! Ad: Finding Claims” worksheets (*one set per student—for homework*)

Implementation Steps

1. **Discuss the claims in the article “A Snowman in the Desert.”** Have students share the four claims they listed on their worksheets, and have the class discuss whether or not the claims have been accurately phrased. Working from student examples, standardize the wording so that all students will be checking the same claims. List the following claims on the board.
 - 1. Insulators work by slowing down the transfer of heat.
 - 2. The air in Styrofoam makes it a good insulator.
 - 3. Heat travels in three ways—by radiation, conduction, and convection.
 - 4. A vacuum is an excellent insulator.
2. **Show the Day 2 Slideshow.** It provides a brief review of the process, described in “Tim’s Guide,” that students will use to check the claims in “A Snowman in the Desert.” **PAUSE the slideshow at Slide 10.** The rest of the slideshow should be shown after students have finished checking all four claims.
3. **Distribute “Snowman Story Resources” and “Snowman Story: Checking Claims” worksheets.** Students will use the worksheets to record information they find in the resources that is relevant to the claims they are investigating. Place students in groups of four, and give each group a set of the resources and two sets of the worksheets. Each group should divide into pairs, and each pair should investigate two claims by examining the resources and looking for information relevant to those claims. Students use the worksheets to record the information they find. Caution students that a resource may not have information relevant to a particular claim they are investigating.

Next, students must decide if each claim is true or not. They do that by deciding if the information they recorded in the worksheets supports or contradicts the claim. Remind them that the rule at *NoWay!com* is that if they find counterevidence that invalidates a single claim, the story should not be published. Based on what they find, they should vote as a group whether or not to publish the story. Have each group share its decision with the class and discuss the evidence on which they based it. Have the class discuss whether or not they have identified the evidence correctly and whether the evidence supports or contradicts each claim. Evaluate the evidence. Tally the groups’ votes for or against publication on the board.

4. **Show the rest of the Day 2 Slideshow** (slides 11–18). These slides reveal that there’s evidence to support all four of the claims, and that none can be invalidated by the resources. It’s a true story about two guys who used insulated vacuum panels

to transport a snowman from Japan to Bahrain, so groups who voted to publish it made the right decision.

5. **Distribute homework.** Give students the next item they will investigate (“Zippy Pop!”) and the accompanying worksheets (“Zippy Pop! Ad: Finding Claims” worksheet.). As with the snowman story, their task is to read the story and reword the story sentences in the worksheets as claims.