

Photosynthesis *No Way!* Activity—Day 1 Instructions

Day 1 Materials

- Day 1 Slideshow (*to show to the class*)
- Article: “A Huge Discovery” (*one copy per student*)
- “Redwood Story: Finding Claims” worksheets (*one set per student—for homework*)

Implementation Steps

1. **Introduce the activity.** Students will assume the role of editors at *NoWay!com*, a site that publishes amazing-but-true stories. Their job? To check out science-themed stories being considered for publication. If they find that all the claims in a story are supported by evidence, they can publish the story. But if they find counterevidence that invalidates a claim, the story should not be published.
2. **Show the Day 1 Slideshow.** This draws students into the premise of the activity. It introduces them to *NoWay!com*, offers examples of the types of stories the site features, and provides a guide (“**Tim’s Guide**”) for how to investigate claims by checking them against the evidence available in the resources provided.

In “**Tim’s Guide**” (slides 13–31), the site’s science fact-checker demonstrates his process for checking out claims. The example he uses is a story about a man who says he grew gigantic mushrooms by speeding up photosynthesis, the process by which he claims they grow. Tim shows how he investigated all the claims in the story. Two claims were supported by evidence, but he found counterevidence that contradicted the man’s claim about how mushrooms grow, thereby invalidating the story. It was a hoax by a man seeking to lure tourists to his town, and the site did not publish it.

Pausing the slideshow at various points offers opportunities for discussions about the nature of scientific claims and evidence. When students start investigating stories, their main goal will be to look for evidence that contradicts a claim, so discussion should include the role of counterevidence in science.

3. **Distribute “A Huge Discovery.”** This story—about a woman who claims to have discovered why redwood trees grow to such enormous heights—is the first one that students will consider for publication. If there’s time, have them read it in class; otherwise, assign it as homework.
4. **For homework, distribute “Redwood Story: Finding Claims” worksheets.** Explain that the worksheets list sentences in the story that refer to science. After reading the story, the students’ task will be to turn those story sentences into claims. Model this process by using one of the sentences listed in the worksheets. For example, the story sentence “For one thing, they are very resistant to bugs, disease, and fire—things that often kill other trees” could be summarized and rephrased as a claim this way: “Redwoods are resistant to bugs, disease, and fire.”

Explain that on Day 2, students will go through informational resources to look for evidence that contradicts or supports the claims in the story. Based on what they discover, they will decide whether *NoWay!com* should publish the story.