

Photosynthesis *No Way!* Activity—Day 2 Instructions

Day 2 Materials

- Day 2 Slideshow (*to show to the class*)
- “Redwood Story Resources” (*one set for each group of four students*)
- “Redwood Story: Checking Claims” worksheets (*two sets for each group of four students*)
- Article: “Superplant Produces 32,000 Tomatoes!” (*one copy per student—for homework*)
- “Tomato Story: Finding Claims” worksheets (*one set per student—for homework*)

Implementation Steps

1. **Discuss the claims in the article “A Huge Discovery.”** 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. Redwoods can grow taller than the Statue of Liberty.
 - 2. Redwoods are resistant to bugs, disease, and fire.
 - 3. Redwoods thrive in flooded areas, where many other trees would die.
 - 4. Trees grow by absorbing soil through their roots and turning it into wood.
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 Huge Discovery.” **PAUSE the slideshow at Slide 10.** The rest of the slideshow should be shown after students have finished checking all four claims.
3. **Distribute “Redwood Story Resources” and “Redwood 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that the rule at **NoWay!com** is that if they find counterevidence that invalidates a single claim, the story should not be published.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 11–14). These slides reveal that there’s evidence to support three of the claims. But the resources also contain

information about photosynthesis that invalidates the claim about how trees grow. The story's crucial claim is contradicted by the evidence, so groups who voted not to publish it made the right decision.

5. **Distribute homework.** Give students the next article they will investigate ("Superplant Produces 32,000 Tomatoes!") and the accompanying worksheets ("Tomato Story: Finding Claims" worksheet.). As with the redwood story, their task is to read the story and reword the story sentences in the worksheets as claims.