
Using the Showing Evidence Tool to Target Thinking Skills

Step 3: Reviewing a Sample Case

In this step, you open a sample student case for *The Case of the Mysterious Malady* unit designed for high school learners. For context, review the Unit Summary and Curriculum-Framing Questions below. Then, with a partner, open the sample student case and review the team's exploration of the case prompt, *What is the cause and source of Sally's illness?* Consider the elements of an argument on the previous pages as you review this argument case.

Unit Summary

Students act as consulting investigators for the Environmental Protection Agency (EPA) to evaluate the illnesses of a family in the area. They receive memos with clues that guide them through their team's research of a potential toxin. Students use previous experience with gas laws and apply their knowledge to determine the source of the illness. Students evaluate four different claims and find research that either strengthens or weakens each claim. They use the *Showing Evidence Tool* to organize their evidence and come to a conclusion as to what is causing the illnesses. Students' research and persuasive skills are put to the test as teams argue their conclusions in a mock trial.

Curriculum-Framing Questions

Essential Question

How do we decide which scientific claims to believe?

Unit Questions

How does one gather and process scientific data to support a claim?

How can we apply gas laws to help us solve a problem?

Why might symptoms not provide enough information when we are trying to diagnose an illness?

Content Questions

What is a toxin?

How does the random motion of molecules explain diffusion of gases such as carbon monoxide, chlorofluorocarbons, and radon?

How does the Ideal Gas Law apply to the diffusion of toxic gas indoors?