

## Quest Design to Stop a Thief

### Quest Findings: Reflect on Your Demonstration

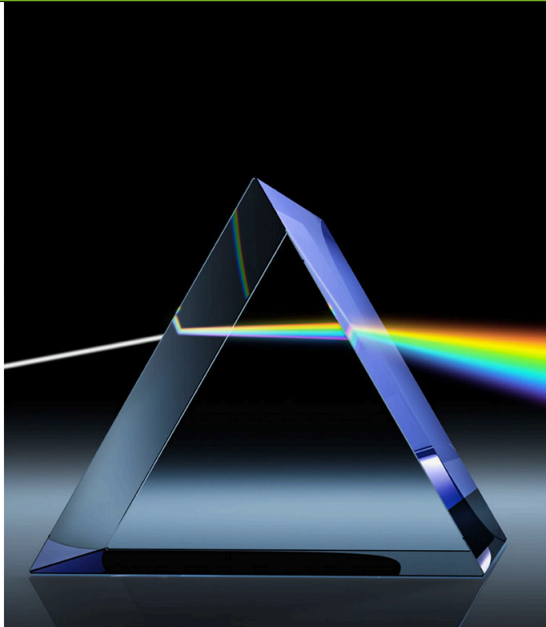
#### Teaching Strategies and Answers (Digital Activity)

**STEMQuest** Reflect on Your Demonstration

**Transfer Understandings**

2. Based on what you learned in this topic, what other fields or careers do you think require a good understanding of light and its behavior?

Enter Text Here



< 3 of 4 >

**This activity provides students the opportunity to synthesize the STEMQuest activities in a meaningful way. Students will present their demonstrations.**

**Teaching Tips** Encourage students to practice their demonstrations several times to ensure that they can talk smoothly and clearly about their solutions. Also, have students test their set-up multiple times to make sure it works as desired. Student presentations should be completed before they start the digital activity.

**Career and College Readiness** Consider mimicking a real-world bidding process, by having each group come up with promotional materials for a fictional company. Students will realize that considerations such as the quality of their presentations and the look and feel of their designs will come into play in addition to the scientific strength of their designs

**Best Practices** If students are highly engaged in the activity, you may wish to expand the scenario to make it more complicated. Encourage students to set-up as a class a security system that monitors all the valuable objects in the classroom as well as guards the room's entrances and exits. Ask them to try and minimize the number of flashlights, mirrors, and lenses they use in the system.

## ***Continued***

**Quest** Design to Stop a Thief

**Quest Findings:** Reflect on Your Demonstration

**Teaching Strategies and Answers** (Digital Activity)

### **Integrating Instructional Strategies**

**SEP Obtaining, Evaluating and Communicating Information** Have students listen attentively to other groups' presentations. Ask them to write about the designs and presentations of other groups in terms of things that they liked and would incorporate into their future demonstrations.

**CCC Structure and Function** The digital activity contains photographs of prisms. Ask students to share what they know about how prisms work, and have them brainstorm about how a prism's structure and function are related.

### **Answers**

1. Accept all reasonable responses. Students should use their own experiences working on their group's solution to support their ideas.
2. Sample answer: I think an optometrist would need a good understanding of light and its behavior. An optometrist makes glasses using lenses to correct people's vision.
3. Accept all reasonable responses. Students should use their personal STEMQuest experience to support both of their answers.