
Video Component

Implementation Strategy

The NASA SCI Files™ is designed to enhance and enrich existing curriculum. Two to three days of class time are suggested for each segment to fully use video, resources and activities.

Before Viewing

1. Before viewing Segment 1 of *The Case of the Powerful Pulleys*, read the program overview to the students. List and discuss questions and preconceptions that students may have about work, force and energy.
2. Record a list of issues and questions that the students want answered in the program. Determine why it is important to define the problem before beginning. From this list, guide students to create a class or team list of three issues and four questions that will help them better understand the problem.
3. **Focus Questions**—These questions at the beginning of each segment help students focus on a reason for viewing. Students should copy these questions into their science journals prior to viewing the program. Encourage students to take notes while viewing the program to help them answer the questions. An icon will appear when the answer is near.

View Video Segments

“What’s Up?” Questions—These questions at the end of the segment help students predict what actions the tree house detectives should take next in the investigation process and how the information learned will affect the case.

For optimal educational benefit view *The Case of the Powerful Pulleys* in 15-minute segments and not in its entirety.

After Viewing

1. Have students reflect on the “What’s Up?” Questions asked at the end of the segment.
2. Discuss the Focus Questions.
3. Students should work in groups or as a class to discuss and list what they know about the content from the segment. The students may conduct independent research, or you may provide them with the information needed.
4. Choose activities to reinforce concepts discussed in the segment. The variety of activities can enrich and enhance your curriculum. Activities may also be used to help students “solve” the problem along with the Tree House Detectives.