

UNIT 7

Unit 7 Overview: e-Mission

41

Lesson 15: e-Mission

Materials

<u>Articles</u>

Mission Briefing:

Space Station Reference Guides (for all teams)

Team Preparation Materials (for all teams)

Materials as outlined in the above two pieces.

Storyline

• The students will participate in an e-Mission.

Main Topics

- 1. Solar weather forecasters have declared that a major coronal mass ejection, called a Solar Proton Event, is underway.
- 2. Space Station Alpha and the astronauts are in danger.
- 3. Data from the GOES satellite and the space station's monitors are being sent to Mission Control every 15 minutes. This data is being forwarded to the Mission Specialist teams.
- 4. Data reveals a variety of emergency situations that must be analyzed and addressed.

Outcomes

- 1. Students will demonstrate their understanding of tables and graphs to analyze the status of the space station.
- 2. The teams will create an action plan for the astronauts to meet various space station emergencies.
- The students will demonstrate teamwork and cooperation to meet the e-Mission challenge.

Materials Preparation

The computer lab or other designated room should be set-up based upon the article, "Classroom Setup" and technical specifications.

Vocabulary



UNIT 1

Unit 7 Overview: e-Mission

42

Teaching Approaches

The students will be on their own during the e-Mission. However, it is advantageous to check the early "returns" regarding status reports to Mission Control. Teams that make computational errors in the first several rounds of data releases can be saved a great deal of frustration if you troubleshoot the reporting process. Meanwhile, keep track of the situation and ask the various teams questions regarding data trends and possible actions they might suggest if the conditions continue to deteriorate on board the space station.

Connections to Other Units

The teachers who approved your students' absence from their class might appreciate a brief "thank you" note from your students, especially if the e-Mission is a success. Think about it. Wouldn't you?

Internet Resources:

http://clc.cet.edu/teacher/requirements.html http://clc.cet.edu/teacher/computersetup.htm

Looking Ahead:

This is the last formal e-Mission experience. Challenger Learning Center, however, would like to hear from you and your students.

If time allows, please take one more class and have the students de-brief the Mission Specialist training the e-Mission experience and send us letters or emails. We would love to hear about your students' reactions, what they learned, what they didn't learn, what they might want to learn more about, and what they would do differently if they could do it again.

Thank you for your time and effort. We hope that you have found e-Mission: Space Station Alpha a rewarding experience and that we'll "see" you next year.

Sincerely,

Mark Lindsay Lead Flight Director CLC Mission Control 316 Washington Avenue Wheeling, WV 26003 Email: