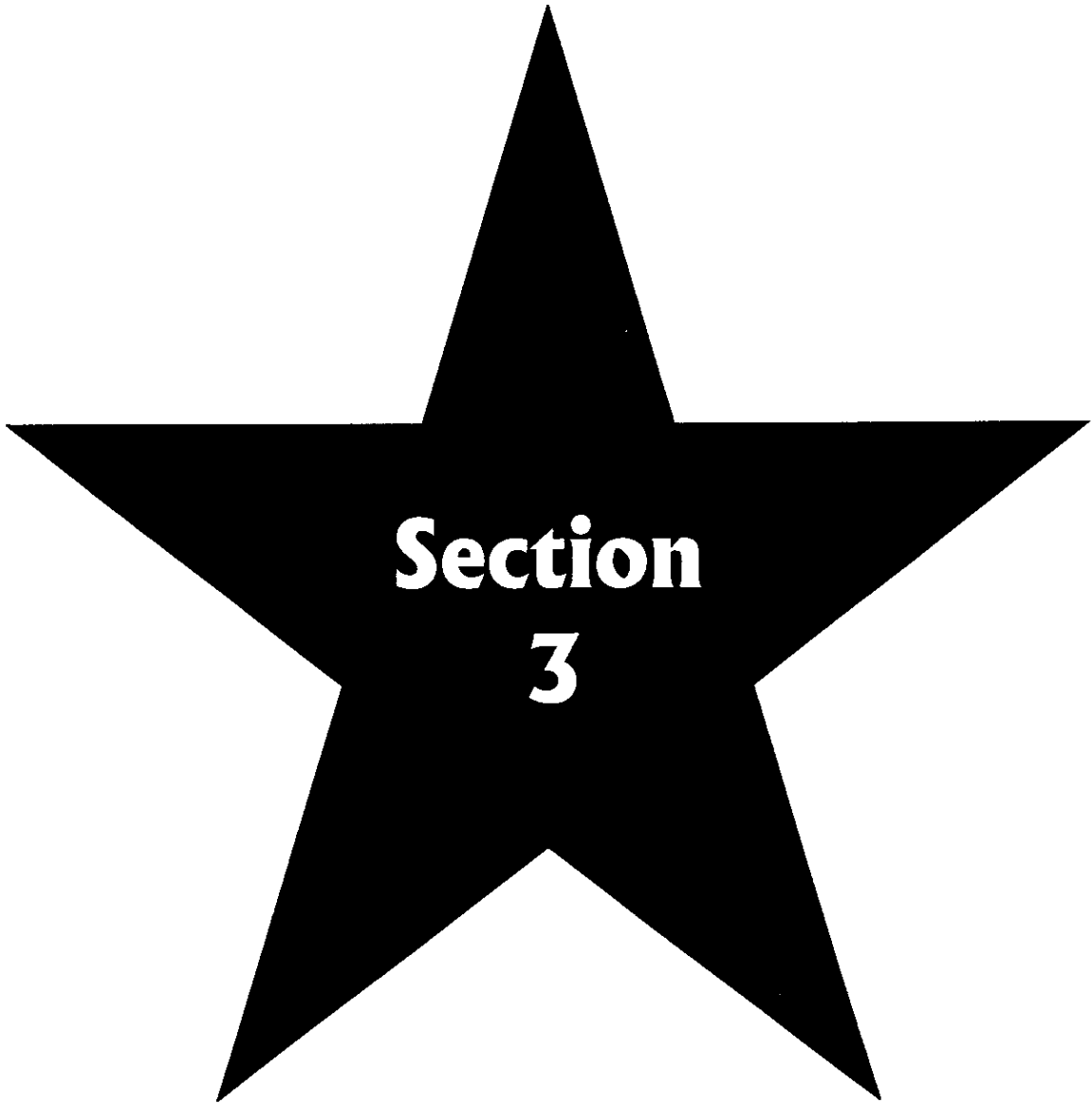


Post-Mission Activities



**Section
3**

Press Release

Objective: To give students the opportunity to invite local media to cover their visit to the Challenger Learning Center and to practice presenting an accurate summary of the event to be covered.

Materials: School media contact list, computer, fax machine or envelopes with stamps

Activity Duration: 30-45 minutes

Teacher Background Information:

Press Releases for mission dates provide an excellent opportunity for potential media coverage of the mission as well as providing students with the experience of developing an effective summary statement to send out to various media groups. To have the best chance for media coverage, it is customary to send out a press release approximately two weeks prior to the event in question. Students and teachers should decide as a group if the best chance for media coverage would be the mission itself or the press conference at the school if you choose to do so. Of course, both times and dates could also be included.

The Anatomy of a Press Release:

Contact Name/ Phone- Clearly stated in the top-right corner of the press release

Location- Should be in the first sentence of the press release

Date/ Time- Also should be listed in the first sentence of the press release

Admission Information- Who will be there? Should be in first or second sentence

Description- What is happening? Be certain to make the project seem as unique as possible. The description has to be interesting enough that a media representative will choose to cover this event over some other event.

Remember, there are always news events to be covered. You have to find a way to make your event the most interesting, the most rewarding, and the most exciting of all the potential events.

Personal Debriefing

Objective: To encourage students to speak or write in complete sentences answers to questions about how the Challenger Learning Center affected them.

Materials: Question sheet for each individual; can work in teams of two

Activity Duration: 30 minutes for each of the three sections

Teacher Background Information:

The main goal of the Challenger Learning Center program is to change the way that students perceive math and science, and their perception of their ability to perform well in these fields.

This is of course a very difficult goal to measure. One method is to have students participate in a self-reflection and answer questions that center around their perception of math and science. The following activity allows this self-reflection to occur.

Procedure:

1. This activity is divided into three sections: Self Awareness Questions, Reflection Questions, the Evaluation. Each section should be completed on a different day.
2. Pass out the questions or evaluations to the students. If you have pictures taken of the mission, the DATA Logs used during the mission, and the station descriptions with pictures, it can be very

helpful for the students in remembering more details regarding their visit to the center.

3. Have the students answer the questions and the evaluation and present some of their answers before the class.

Questions for Self-Awareness Debriefing

1. What was your assignment on the space flight simulation and how was it important to the success of the mission?
2. If you had a chance to fly another mission, on which team would you want to serve and how would you prepare for your flight?
3. How were teamwork, reading, following directions, and preflight training in the classroom important on the mission?
4. After the visit to the Challenger Learning Center, do you think you are more interested in science, math, and technology? Will you follow more closely the actual flights of the NASA Space Shuttles?
5. When something did not go as planned, how did you handle the situation?
6. What character traits did you discover about yourself (patience, cooperative, impulsive)?
7. Did you find you were using skills you didn't know you had?
8. How did you feel when you contributed to the success of the mission?
9. Did you feel any self-confidence and motivation as a result of the mission?

Reflections on your Mission

Answer the following questions using complete sentences.

1. What did you do on your team?
2. Compare your experiences in Mission Control and the Space Station.
3. Describe problems your team encountered in Mission Control.
4. Describe problems your team encountered in the Space Station.
5. Describe how each problem was handled.
6. How could you have made your job easier?
7. What qualifications should be required of an applicant in your position?
8. If you were to develop a training program for your team, what would you include?
9. Explain how your job was a necessary part of the mission.
10. If you hadn't done your job, how would it have affected others?
11. In your opinion, were you prepared for your role? Explain.
12. What skills were important to be successful in your position?
13. How did you feel after the mission?
14. What advice do you have for someone assigned to your position?
15. What was the most significant thing you learned from this experience?

Student Evaluation Forms

Name: _____ Age: _____ Grade: _____

- | | | |
|---|-----|----|
| 1. I felt well prepared to participate in the mission | Yes | No |
| 2. I understood the task cards | Yes | No |
| 3. The simulator rooms and equipment were excellent | Yes | No |
| 4. My Flight Director knew a lot | Yes | No |
| 5. My Flight Director helped me understand what to do | Yes | No |
| 6. My Flight Director answered my questions | Yes | No |
| 7. My Flight Director challenged me to do my best | Yes | No |
| 8. I played an important role | Yes | No |
| 9. I enjoyed my job | Yes | No |
| 10. I followed all directions carefully | Yes | No |
| 11. I worked hard | Yes | No |
| 12. I overcame difficulties | Yes | No |
| 13. MY team worked together to achieve mission goals | Yes | No |
| 14. I learned how to communicate better | Yes | No |
| 15. I learned a new way to work with others | Yes | No |
| 16. I cooperated well as a team member | Yes | No |
| 17. Teamwork by everyone made the mission successful | Yes | No |
| 18. I was able to solve problems and make good decisions | Yes | No |
| 19. I feel more confident using technology like instruments,
computers, and robots | Yes | No |
| 20. I learned about math, science, and technology | Yes | No |
| 21. I used a computer successfully | Yes | No |
| 22. I learned a great deal at the Challenger Learning Center | Yes | No |

- | | | |
|--|-----|----|
| 23. I would like to do more activities related to this mission
back at school | Yes | No |
| 24. I am more interested in space | Yes | No |
| 25. My experience makes me think I could have a career
that uses math, science, or technology | Yes | No |
| 26. This experience will help me succeed in the future | Yes | No |
| 27. On my own, I plan to do activities related to this mission | Yes | No |
| 28. This was a fun way to learn | Yes | No |
| 29. I would like to participate in this mission again | Yes | No |
| 30. I think that the school should allow students in the grade
below me to participate in this activity next year | Yes | No |

The best part of the mission was:

The worst part of the mission was:

Challenger Challenge Competition

Objective: To engage students in an interactive trivia competition to test key concepts covered during the pre-mission and mission simulation activities.

Materials: Three colored index cards for each student labeled **A, B, and C.**

Activity Duration: 1 hour

Teacher Background Information:

After returning from their visit to the Challenger Learning Center, there are many key concepts that we hope the students understand better than prior to the visit. This trivia game will allow you to observe and informally evaluate the learning associated with student participation in the CLC program.

Procedure:

1. Explain to your students that they are about to take part in a trivia game about their visit to the Challenger Learning Center.
2. Have the students line up against a wall in a large area.
3. Use masking tape, or pieces of paper to mark twenty lines moving away from the student line.
4. Begin asking the students the multiple-choice questions attached.
5. After each question is read, the students will choose answer A, B, or C and hold their card where no one can see it.
6. When you ask for the answer, each student will turn their card around to reveal their answer.

7. The students who answer the question correctly will step forward one line.

8. After all twenty questions have been asked, the winner is the student or students who have moved forward the most lines.

CHALLENGER CHALLENGE TRIVIA QUESTIONS

1. The mission of the Challenger Space Shuttle was to collect data from Comet

- a) Hale-Bopp
- b) Halley**
- c) Hubble

2. A short period comet comes by the Earth

- a) every 100 years or less
- b) every 200 years or less**
- c) every 200 years or more

3. Short period comets come from the

- a) The Oort Cloud
- b) Kuiper Belt**
- c) Milky Way

4. Scientists believe comets are made up of

- a) rock, ice, dust, gasses**
- b) water, gas, metal, dirt
- c) ice, stone, dust, nitrogen

5. The head of a comet is called the

- a) corona
- b) brain
- c) coma**

6. A meteorite is
- a) **the remains of a meteor that has landed on the Earth's surface**
 - b) a shooting star
 - c) a piece of an asteroid
7. Latitude lines are imaginary directional lines that circle the Earth north and south of the
- a) North Pole
 - b) South Pole
 - c) **Equator**
8. The Wright Brothers made the first powered flight on December 17 of
- a) 1950
 - b) **1903**
 - c) 1923
9. Orville and Wilbur flew the Wright Flyer on the sands of Kitty Hawk in the state of
- a) **North Carolina**
 - b) Ohio
 - c) Illinois
10. A very precise position for any place on earth can be located by using
- a) a map
 - b) **latitude and longitude**
 - c) the North Star

11. The three types of rocks are igneous, sedimentary and
- a) **metamorphic**
 - b) limestone
 - c) volcanic
12. What scale measures how acidic or basic a compound is?
- a) Geiger Scale
 - b) **ph Scale**
 - c) Richter Scale
13. Galaxies and stars are made up of different elements and gasses that can be identified by a visible spectrum of
- a) waves
 - b) light
 - c) **colors**
14. Wavelengths that are longer than red, cannot be seen with the eye, but can be felt as heat are called
- a) **infrared**
 - b) microwave
 - c) radioactive
15. The origin of the word **comet** comes from the Greek word for
- a) star
 - b) snowball
 - c) **hair**

16. To measure angles you use a tool called a

- a) **protractor**
- b) compass
- c) ruler

17. There are four forces of lift. The force that holds an airplane in the air is called

- a) **lift**
- b) thrust
- c) speed

18. Sir Isaac Newton, an English scientist, observed which force in action when he was sitting under a tree and an apple fell on his head?

- a) lift
- b) **gravity**
- c) drag

19. The medical test that reads the pressure that is exerted by the blood on the walls of the arteries measures a person's

- a) cholesterol level
- b) pulse rate
- c) **blood pressure**

20. A number of current NASA missions will collect cometary particles, to be brought back to Earth to be studied, by using a

- a) satellite
- b) **probe**
- c) robot