e::MISSION
SPACE STATION ALPHA

Lesson 2: Application Day I

Preparatory Readings

LP #	Unit 1: Mission Bfg/ App Process
Mission Briefing	
1	The Mission
1	We Need You
1	Space Station Alpha
opt	Verizon
How to Apply	
2	Apply Today
2,3	Personal Essay
2,3	Class Activity: Station Systems
opt	Mission Patch

LP #	Unit 2: Space Weather
4	Specialist Orientation
Chapter 1	
4	Here Comes the Sun
4	Inside the Atom
5	Sheer Magnetism (Hands On)
5	Dr. Z: Inside the Sun

LP #	Unit 3: Radiation Health
Chapter 2	
7	New Frontiers & New Dangers
8	Electromag Rad: Taming the Wild Energies
7	Do You Want the Recipe?
7	In the Kitchen with Poly
7	Measuring Exposure to Radiation
Enrichment Activities	
7	Ready, Aim, Mutate! (Hands On)
7	Sweet Dreams are Made of These (Hands On)
7	Are You Too Hot? (Hands On)

LP #	Unit 4: Power Systems
Chapter 3	
9	The Energy Supply Problem
9	Rechargeable Batteries
10	All About Power
10	Emergency Procedures
10	Practice Ex: Power on the SS (Hands On)
Enrichment Activities	
10	Electrical Current Mag Field (Hands On)
10	Electrical Circuit: Quick Guide (Hands On)
10	Nailing Down Energy (Hands On)
10	A Shocking Discovery (Hands On)
10	Electrolysis (Hands On)
10	It's Electric (Hands On)

LP #	Unit 5: Life Support
Chapter 4	
12	How I Discovered Air
12	A Weighty Discovery
12	Living in a Bubble
12	Breathing on the Space Station

LP #	Unit 6: Pre-Mission Prep
13	Overview of Teams
13	Mission Directives
13	Classroom Setup
Team Preparation Introductions	
13	STORM Team Overview
13	Radiation Team Overview
13	Power Team Overview
13	Life Support Team Overview
13	Communications Team Overview

Other Homework Due: (none)

Subject
Students begin to apply for Mission Specialist status.

Description of Student Activities

After a brief discussion and clarification of any questions regarding the *Personal Essay* assignment, divide the class into groups to conduct the first segment of the *Class Activity*: *Space Station Systems*.

Duration

10 min. Review *Personal Essay*
35 min. Part One and Two of *Class Activity*

Materials

How to Apply:
Apply Today
Personal Essay
Class Activity: Space Station Systems
*Print enough copies for each, 4-student group. Used during Lessons 2 and 3.
Mission Patch (Optional)

Main Topics

1. The application process is a combination of individual and team involvement.
2. Space station systems are designed to support and sustain human systems and human work functions.
3. Working under time constraints as a team requires cooperation.
4. The point of this exercise is for your class to prove that it can handle a team challenge. Emphasize that Mission Control (at the Challenger Learning Center) is looking for students who can demonstrate cooperation, creativity, organization, working under pressure, and problem solving. Although we are looking for good answers, we are not requiring that the answers be thoroughly researched or based on scientific accuracy.

Outcomes

1. Students will contribute to a team effort.
2. Students will work under time constraints to accomplish a group task.
3. Students will demonstrate skills related to cooperation, creativity, organization, working under pressure, and problem solving.

Special Comments

Maintaining a strict schedule of events is very important during this class. Estimate the time the students will need to complete the first part of the *Class Activity* and impress them with the importance of staying on schedule.

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Procedure

1. (10 min max) Review *Apply Today*. Discuss *Personal Essay* assignment and make sure there are no questions regarding the homework. Stress that the students should follow the instructions exactly. When students return to class tomorrow, they will be sharing their essay with another student for feedback.

2. Ask if there are any volunteers who would like to create a mission patch (optional). This may be done as an assignment for extra credit (if extra credit is acceptable with your policies). If several students are interested in submitting a mission patch, the class may wish to pick the patch they would like to represent them on this mission. Display the mission patch on the wall and please submit a copy to the Challenger Learning Center. By special request, you may ask the Mission Flight Director in advance to hang your student's patch in the Mission Control booth.

3. (20 minutes) Conduct Part One of the *Class Activity*. Assign a timekeeper. Stress the importance of speed and careful timekeeping. Hand out all copies of the *Class Activity* to all teams. We suggest there be no more than 3 to 4 students on a team. Select a class moderator to help consolidate all student lists at end of each part. Another student may be selected to help prepare final application.

4. (10 minutes) Conduct Part Two of the *Class Activity*. Depending upon the maturity level of your class, you may want to let them conduct this activity with little input from you. If you have chosen a good moderator, this should be fairly straightforward. It's important that by the time of the mission that students "own" or take responsibility for what they need to do for a successful mission. This can be a simple step in that direction.

Homework for Lesson 3

- Students write first draft of their *Personal Essay*
- (Optional) *Class Activity*: Students complete Parts One and Two at home