



Lesson 2 - Applying for the Mission (required)

Background

Part A of this required lesson discusses the application process necessary to request a school's participation in the Moon, Mars, and Beyond Live Simulation. Students have already been introduced to the Mission Scenario and the Specialist Teams they will join in order to participate in the mission. Part A extends this theme. Students become more aware of the responsibilities of their participation and they begin to relate this to actual job responsibilities of people who work in the space industry.

Students also become more aware of our history of space exploration and the great strides the space industry has made; not only exploring our universe, but in the many fields of innovative technology that have been necessary to accomplish space exploration.

Part B allows the students to think about the skills and qualifications needed for working in space and the qualifications they may have that would suit them to a particular mission job. This lesson further extends the application process to an individual level as they complete job applications and think about applying the skills they learn in school to more concrete tasks. Students see results of their efforts when they are accepted to positions on Specialist Teams.

Teacher Notes and Hints

- This lesson includes a variety of suggestions for completing the application process, but these suggestions can be worked in a number of ways at your convenience. Your classroom setting, your student population, and student strengths and weaknesses may change the implementation of these suggestions. The outcome will still be successful if the tasks are done.
- Several different application forms are provided for varying grade levels. Fourth and fifth graders have greater writing abilities and can practice these writing skills at a higher level.
- Decide how you want to assign students to Specialist Teams. If the students can choose their first, second, and third preference for mission jobs, it will be easy for you to give them one of their choices and they will be satisfied with their job assignment.
- When you begin the lesson and introduce the application process,
- stress that not everyone may get their first choice; it is trying to match their strongest skill to the task that will allow them to find the lost astronauts. If the application process is handled in the most positive way (the mission really needs the students' strong skill in _____), most students do not complain about not receiving their first choice.

- Some teachers just assign students to tasks. While this may work well for third and fourth graders, not allowing fifth graders to apply for specific choices eliminates the possibility of a student who may surprise you. Many students apply for tasks that teachers would not expect them to choose; this allows both the teacher and the student to explore new expectations and ideas.
- Decide how you will handle the Mission Patch activity. You may have students design and construct individual patches or you may have the students design patches as Planet Teams or as Specialist Teams.
- You may want to use the application process and patch design activity as articles for parent newsletters or for local news releases about your upcoming mission.
- If you had the students begin mission folders, they can now find the team descriptions of Lesson 1 to review the tasks involved with each team or specialist.

Skills and Objectives

Part A

Students will be able to:

- Learn about the history of our space exploration and the importance of learning about our universe.
- Find out about the great variety of careers available in the space industry.
- Learn about some of the skills and qualifications needed for a career in space.
- Write a brief summary (one or two paragraphs) of why they would like to participate in this mission.

Part B

Students will be able to:

- Identify skills they may have to complete a job application for a Moon, Mars, and Beyond Mission Team.
- Complete the job application that will help them to focus on the skills needed in the mission.
- Design a mission patch for their Moon, Mars, and Beyond Mission.

Activity Overview

This lesson discusses the application process for the school's participation in the Moon, Mars, and Beyond Live Simulation and the students' assignment to a particular mission job. Students read about the history of our space exploration and find out about the many and varied careers involved in our space industry.

Students complete job applications after again reviewing the team requirements and tasks and design a mission patch to represent their school, their class, or their team. Remember, if one patch is chosen for the class, send it to us and we will display it on Mission Day.

Key Concepts

1. With any job, there are certain basic qualifications and skills that are necessary; people apply for jobs and should base their applications on their matching skills.
2. Space exploration has provided information on the planets, stars, moons, and other space objects, along with knowledge about the objects outside our solar system.
3. Space exploration has also resulted in the invention of technology that has been needed to accomplish space missions; this technology has also been useful in everyday society.
4. NASA creates mission patches to represent every mission; creation of these patches represents not only the mission objectives, but the astronauts who fly the missions.

Materials

- Student worksheets
- Student application worksheets
- Materials for mission patch design

Procedure

Prior to class

Decide how you will have your class create their mission patches. They can create school patches, class patches, Planet Team patches, Specialist Team patches, or individual patches. This just depends on whether you want your students to work collaboratively in groups or as individuals.

Decide what materials they may use and gather the materials. If you want to display the patches around the classroom, then any paper they can color will do. Construction paper can be used if they can cut out designs and glue them onto the patch.

If they can make patches that pin, then you will have to provide a sturdier material that can hold the pin and the design they attach to it.

In class - Part A

Distribute the student worksheet and introduce the lesson to the students.

Have the students read the background information about the history of space exploration aloud in class.

Allow time for discussion. Make sure the students are aware of the great contributions space exploration has made about our universe and to our everyday lives through the invention of technologies necessary for space research.

Read the directions with the students and discuss some suggestions for the contents of their paragraphs.

You can use their paragraphs for assessments through Language Arts class or as part of student portfolio work.

In class - Part B

Distribute student worksheets and read the preview about NASA mission emblems and directions with the students.

Distribute materials for the design and construction of the class or student mission patch.

Distribute the student worksheet for the student application.

Allow time for discussion of the applications. You may have to make some suggestions as to what the students may include in their answers.

Give real life examples of applying for jobs and ask students if they know anything about applying for jobs because of an older brother, sister, or parent.

When the students have submitted their applications, fill the mission team positions and announce the positions to the students. You may want to post a “Crew Manifest” list outside your classroom; this usually fuels the excitement about the upcoming mission!

To request the acceptance letter to be sent to you through email, complete the short form on the link below:

[Acceptance Letter request](#)

Extensions

Have the students use the internet to find additional information on NASA careers and the requirements needed for the careers. There are numerous NASA sites with great career information specific to the grade level taught.

If available, bring in a few real job applications so students can see what

types of questions could be asked.

Bring in the classified section of the newspaper and read job listings with qualifications for both education and experience specified.

Lori Kudlak
Assistant Director
Challenger Learning Center
Wheeling Jesuit
University
316 Washington Ave. Wheeling, WV, 26003
304-243-8729
lkudlak@cet.edu

