# Lesson 2 – Student Worksheet
# Part A

## Background

People have been watching the heavens and charting the stars and movements of heavenly objects for centuries. Ancient astronomers (people who study space) looked at points of light that appeared to move in the sky and called these points of lights "planets," meaning "wonderers." They named the planets for gods because they could not explain what they were or how they moved. Many cultures watched the skies and wrote legends and stories of mythology.

Over the centuries, inventions were made like the telescope that could give astronomers a better idea of what makes up our solar system. Scientists found out the Earth revolved around the Sun and there were other planets and moons.

What we know about the universe has grown over the years because people kept watching the skies and asking questions about the movements of the planets and stars. They wanted to know even more. Like the pioneers who explored new worlds on Earth, it was natural that we wanted to explore space.

Students sometimes take space travel for granted. They have grown up knowing that thousands of satellites revolve around Earth and that Americans have walked on the Moon. Did you know that many of the everyday things you use exist because we needed them to solve a problem for our space travel?

Satellites first used by NASA led to satellites being used for TVs, weather forecasting, and the monitoring of oceans, hurricanes, and tornadoes. The Velcro on your tennis shoes and jackets, the Teflon on kitchen pots and pans, and smoke masks used by firemen have all come from space industry work.

People sometimes think that you have to be an astronaut to work in space, but there are many different types of workers needed for space work and there are many different types of careers you may have if you want to work in the space industry.

Many different types of scientists and engineers work at NASA. Doctors, mathematicians, accountants, geologists (scientists who study rocks), and many other types of scientists work to study space and life in space. Astronomers search for new stars and new planets which may have new life forms.

What type of training do you think you will need to have a career in space? Students interested in a space career, study hard and train for years. The classes you study now will help you have the career you want later on.

## Assignment:

Your Moon, Mars, and Beyond Mission may help you decide whether you want to work in space. Write a brief summary (one or two paragraphs) of why you would like to participate in the Moon, Mars, and Beyond Mission and why you think you may like a job that would let you work in space.

(If you do not think you would like working in space, you could still have a career working for NASA on Earth! Write your paragraphs on why you do not think you would like going into space.)

Your teacher will turn in your paragraphs with other Mission Application materials to the Challenger Learning Center

**Good Luck!!!**

# Applying for the Mission
# Part B

## Class Applications

The Challenger Learning Center is looking for qualified Mission Specialists to participate in the Moon, Mars, and Beyond Mission. We are looking for motivated people who:

- Are willing to learn
- Will work in teams
- Want to use science, math, and reading to solve real problems

If your class is ready to take on this challenge, your teacher should submit your application to Challenger's Mission Control. Your class's application will include:

- Your Application
- Your paragraphs about your interest in a space career
- Your class mission patch design

The Mission Control staff will evaluate your school's application immediately and your teacher will be contacted confirming your appointment as Mission Specialists. Once accepted, we will guide you to the next phase of the project.

Your teacher will mail your class's application materials to the Challenger Learning Center in care of:

**Lori Kudlak**
Assistant Director

Challenger Learning Center

316 Washington Avenue

Wheeling, WV 26003

Or emailed to:
lkudlak@cet.edu

**Thank you and good luck!**

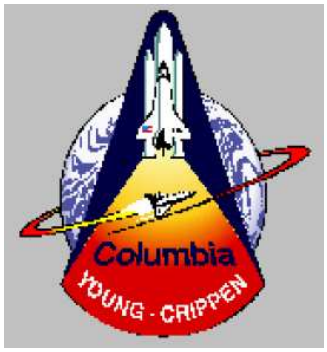
# Mission Patch Activity
# Part B

NASA designs a mission emblem or symbol for every mission. The patch represents the astronauts that fly the mission and the purpose or work of the mission. Astronauts and team members all wear it on their uniforms. Look at the mission patch examples.

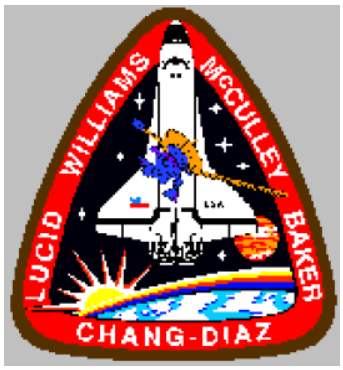
These were patches for Space Shuttle missions. Your class will now design a patch that will represent your school, your class, your mission and you!

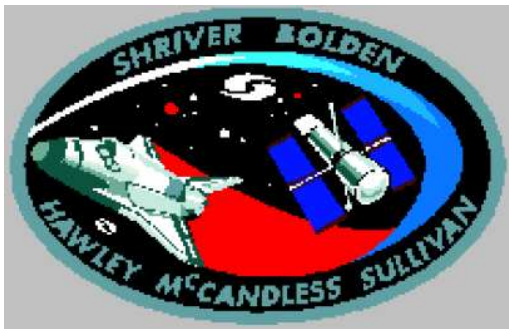
Using the materials your teacher provides, design a patch to be displayed during your mission.

## Mission Patch Examples





# Applying for the Mission
# Part B

## Specialist Application

With any job you may want, there are certain basic skills that are needed to do the job well. Before you get a job, you have to complete an application. This application lets you list your skills and experiences that would make you a good person to have in that job.

You may think that you are too young to have the skills that are necessary for a mission task. If you have worked well on a sports team or in a school club, then you can list that skill. If you do your homework and turn it in on time, then you are responsible about that task. If you always check your work for mistakes, then you are concerned about doing a good job.

Complete the job application for a Mission Team or Specialist position. Doing a good job on the application will help you with the best position for you!

**Good Luck! The lost astronauts are counting on you!**