Performance Task 1

Part 1

Exploring Space

Task:
Your science class takes a trip to the planetarium. An instructor describes the history of space travel in the United States. The instructor also shares some of the possibilities for the future of space travel. You and your classmates become interested in learning more about space travel. During your research, you find three more articles about this topic.

After you have looked at these sources, you will answer some questions about them. Briefly scan the sources and the three questions that follow. Then go back and read the sources carefully so you will have the information you need to answer the questions and complete your research. You may use scratch paper to take notes on information you find in the sources you read.

In Part 2, you will write a story using the information you read.

Directions for Beginning:
You will now look at several sources. You can look at any of the sources as often as you like.

Research Questions:
After reviewing the sources, use the rest of the time in Part 1 to answer three questions about them. Your answers to these questions will be scored. Also, your answers will help you think about the information you read, which should help you write your narrative story.

You may refer back to your scratch paper to review your notes when you think it would be helpful. Answer the questions in the spaces below the items.

Your written notes on scratch paper will be available to you in Part 1 and Part 2 of the performance task.
Source #1
You found an article that tells about President Kennedy’s goal of sending a human to the moon.

Apollo to the Moon

On May 25, 1961, President John F. Kennedy spoke to Congress. He said, “I believe this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to Earth.”

The National Aeronautics and Space Administration was put in charge. NASA launched the effort. It was called Project Apollo. Two other projects were started to gather more information. This information was important to have before the Apollo project could begin.

NASA set up Project Mercury to choose and train astronauts. NASA tested more than one hundred pilots. Only eighteen pilots passed all the tests. Seven were chosen to become the Mercury astronauts. The astronaut trainees went to survival training in the desert. They suffered heat and cold. They were placed into a training machine and flipped upside down over and over again.

Project Mercury then began testing the ability of humans to survive in space and return safely to Earth. On May 5, 1961, Alan Shepard became the first American in space. On February 20, 1962, John Glenn became the first American to orbit Earth. In all, there were six flights with crews. The number of orbits increased. Flights grew longer. On May 15, 1963, Gordon Cooper spent more than a day in space. All of these flights helped NASA prepare for future space travel.

Project Gemini tested new equipment. It also provided training in a series of flights to help NASA find answers to questions. Could astronauts work outside a spacecraft? Could two spacecraft meet in space? Could they dock with each other? How would a long stay in space affect astronauts? The Project Gemini space flights and tests between 1964 and 1966 helped answer these questions. NASA moved forward with Project Apollo and the goal of landing a human on the moon before the end of the 1960s.
Finally, as part of the Apollo project, on July 16, 1969, Apollo 11 lifted off for the moon. Millions of people around the world followed its trip. The members of its crew were Neil Armstrong, Mike Collins, and Buzz Aldrin. They would soon be making history! On July 20, everyone at NASA’s Mission Control in Houston, Texas, waited to hear from the crew. They were thrilled to hear Armstrong’s simple message, “The Eagle has landed.” Six hours later, Armstrong climbed down Eagle’s ladder. He stepped onto the moon, and spoke words that would live forever. “That’s one small step for a man,” he said, “one giant leap for mankind.” This first team of astronauts contributed to people’s knowledge of space. The mission had fulfilled President Kennedy’s dream to put humans on the moon!

Source #2
You found an article about the first female African American astronaut.

**Mae Jemison, Astronaut**

As a young child, Mae Jemison clearly remembers listening to Mission Control’s final countdowns: 5, 4, 3, 2, 1, and liftoff! She remembers thinking that someday she would be on a shuttle headed to space. That someday came on September 12, 1992. Television screens around the world showed the liftoff of the space shuttle *Endeavour*. Jemison was on board. She was the first African American woman to fly in space.
Since 1981 NASA had been sending crews of astronauts into space on space shuttles. Space shuttles were large, winged aircraft that launched as rockets into space. After each mission, the shuttle could return to Earth. It would land just like an airplane.

Mae Jemison was born in Alabama in 1956. Her family moved to Chicago when she was three years old. As a child, she was always interested in science. She spent many hours in the library reading about different scientific topics. Stars and constellations were among her favorite subjects. Mae entered many citywide science fairs. She won first prize for most of them.

Mae was only twelve years old when she started high school. She was just sixteen when she went to college. She attended Stanford University in California and then went to medical school in New York. After graduation she worked for the Peace Corps in West Africa. She then became a doctor in Los Angeles. Although she loved helping people, she hadn’t forgotten her dream of becoming an astronaut.

Dr. Jemison applied to NASA to become an astronaut. After the space shuttle Challenger exploded in 1986, the U.S. space program was put on hold. NASA did not need any new astronauts for a while. Jemison knew about the dangers that astronauts faced, but she wasn’t afraid. She reapplied for the program in 1987 and was accepted.

In 1992, Jemison was a science mission specialist aboard the space shuttle Endeavour. It carried a laboratory called Spacelab-J. The eight-day trip was a joint mission by Japan and the United States. Jemison and six other scientists tested the effects of weightlessness in space. They tested this on humans and on creatures, such as flies, hornets, fish, and frogs.
Dr. Jemison left NASA after six years. One of her projects since then has been to run an international science camp for students. The goal of the camp was to improve students’ understanding of science and increase their problem-solving skills. The camp was named The Earth We Share. At the camp, campers work together to identify possible solutions to global problems.

Mae Jemison has led a truly remarkable life. Her incredible accomplishments have added to what we now know about space. Her desire to share what she has learned has been helpful to generations. She has inspired many young people to do as she did and reach for the stars!

Source #3
You found an article about the different types of spacecraft used for missions.

**Spacecraft: From Module to Shuttle**

Space exploration has significantly changed since it began. Some of the biggest changes were the vehicles that astronauts used to travel into space. Early programs used modules launched on rockets, but eventually NASA developed space shuttles.
The first project that took Americans into space was Project Mercury, which lasted from 1961 to 1963. It used a spacecraft called the Mercury Capsule. The capsule was very small, able to fit only one person who had to remain seated. The Mercury Capsule was launched using a rocket built by the military.

In 1965 Project Gemini began. It also used a capsule; however, it was slightly larger. It could hold two astronauts.

The Apollo program had its initial flight in 1968. Astronauts traveled to the moon on the Apollo missions. They traveled in the Apollo Command Module, which held three passengers. Another spacecraft, the Lunar Module, was used in the Apollo mission. It was used to actually land on the moon. The Apollo mission lasted until 1972. During this time, twelve astronauts walked on the moon and studied its surface.

Until 1981, all spacecraft could be used only once. Then the space shuttle was designed. It had three main parts: the orbiter, the external tank, and the rocket boosters. The space shuttle launched like the rockets of the past, but it landed just like an airplane! The space shuttle was the first vehicle designed to travel to space up to one hundred times. This was a huge advancement in technology and was designed to save money. This money could then be used for more missions, as well as more research. It was also much larger and could carry up to seven astronauts at a time. From 1981 to 2011 there were 135 missions launched on five space shuttles. The names of the space shuttles were Columbia, Challenger, Discovery, Atlantis, and Endeavour. In 2011 NASA’s space shuttle program completed its final mission. NASA ended the program and retired the shuttle fleet.
Space travel for the future is being planned right now. NASA is researching how to send astronauts to the planet Mars. What will their spacecraft look like? We can only wait and see!

Source #1 and Source #2 discuss how two people helped make advances in the exploration of space. Explain how these two individuals made a difference in the field of space exploration. Use at least one detail from Source #1 and one detail from Source #2 to support your answer. For each detail, include the source title or number.
2. Which source would **most likely** be the most helpful in understanding the different methods of space travel used throughout the years? Explain why this source is **most likely** the most helpful. Give at least **two** details from the source to support your answer.

3. Mark the boxes to match each source with the idea or ideas that it supports. Some ideas may have more than one source selected.

<table>
<thead>
<tr>
<th>Source #1: Apollo to the Moon!</th>
<th>Source #2: Mae Jemison, Astronaut</th>
<th>Source #3: Spacecraft: From Module to Shuttle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women have played an important role in space exploration.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Astronauts make trips that improve people’s understanding of space science.</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Project Apollo was a successful project that increased people’s knowledge about the moon and its surface.</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
Part 2

You will now review your notes and sources, and plan, draft, revise, and edit your writing. You may use your notes and go back to your sources. Now read your assignment and the information about how your writing will be scored, then begin your work.

**Your Assignment:**

Your teacher wants you to use the research information you gathered about the history of space travel for a class project. For your part in the project, you are assigned to write a story that is several paragraphs long about what would happen if you were an astronaut who traveled on one of the space missions that you have researched.

In your story, you will be an astronaut. You will prepare for and then participate in a mission into space. Describe how you prepare, how you get into space, and what you do once you are there. When writing your story, find ways to use information and details from the sources to improve your story. Make sure you develop your characters, setting, and the plot. Also use details, dialogue, and description where appropriate.

**REMEMBER: A well-written narrative story**

- has an effective and complete plot.
- is well-organized and clear.
- has an introduction and conclusion.
- has a logical sequence of events.
- uses transitions.
- develops a setting, narrator/characters, and point of view.
- uses description, details, and dialogue.
- has effective and appropriate style.
- uses details from the sources to support your story.
- follows rules of writing (spelling, punctuation, grammar usage).

Now begin your work on your story. Manage your time carefully so that you can

- plan your multi-paragraph story.
- write your multi-paragraph story.
- revise and edit the final draft of your multi-paragraph story.
For Part 2, you are being asked to write a narrative story that is several paragraphs long. Write your response in the space below.

Remember to check your notes and your prewriting and planning as you write, and then revise and edit your story.