

Grade 3 Opinion Performance Task: Astronauts

Task:

Your class has been learning about different types of jobs to prepare for your school's job week. Your class thinks being an astronaut must be an interesting job so the class decides to learn about what it is like to be an astronaut. You have found two sources about being an astronaut.

After you have reviewed 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 will need to answer the questions and complete your research.

In Part 1, you will answer questions about the reading passages. In Part 2, you will write an opinion paper using information you have read.

Directions for Beginning:

You will now review two sources. You can review either of the sources as often as you like.

Research Questions:

After reviewing the research 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 have read and viewed, which should help you write your opinion paper.

Answer the questions in the location your teacher directs.

Sources for Performance Task:

Source #1

You have found a source describing the type of training that astronauts receive in order to do their job.

What is an Astronaut?

by Talia Yee

Have you ever thought about what it is like in space? Astronauts are people who go out into space. Being an astronaut is an exciting job. Astronauts who see Earth from space say that it is round, like a ball. While in space, astronauts can look down and see clouds, land, and water. Some can even see the moon up close. Astronauts get the chance to see more stars than you or I have ever seen.

Being an astronaut may be exciting, but it is not an easy job. A person who wants to be an astronaut has to study for years. There are many things an astronaut must learn to do before going into space for the first time.

A Weightless Astronaut in Space

Astronauts train for hundreds of hours. During their training, they learn about space. This type of training might include studying the stars and Earth. It is important that astronauts study space so that they understand what they will work with while in space. The astronauts also learn medical skills like basic first aid during their training. This training allows them to treat simple medical problems so that they can keep each other healthy and safe in space.

In their training, astronauts also learn what life is like on the International Space Station (ISS). The ISS is a large spacecraft that orbits the earth. The ISS is a place where astronauts do science experiments while in space. Astronauts also learn to eat, exercise, and do experiments while floating in the air. They also practice riding in special vehicles that are just for space. These vehicles bring supplies like food and fuel to the ISS. The vehicles are about the size of a pick-up truck with 12 wheels. Astronauts even take classes in scuba diving!* When they're walking underwater in their scuba suits, astronauts feel the same as they would feel walking in space. Lastly, astronauts must also learn how to work together as a team. This is important because as many as eight astronauts may be in one spacecraft. These astronauts have to learn how to live and work together in space.

Each astronaut has a special job to do as part of the team. Some astronauts learn how to put things together so they become good at fixing things. This is important because if something on a spaceship breaks, the astronauts must be able to fix it themselves. Some astronauts are pilots who know how to fly airplanes. These astronauts have to study how to fly and steer a spaceship. They train for many hours to learn how to turn it, how to make it go faster and slower, and how to guide it through space. Some astronauts are leaders and are in charge of all of the

people on the ship. They make sure that everybody is doing the right job. Other astronauts learn mostly about science. Their job is to learn how living things change when they are in space.

Although each astronaut has a special job on the team, each of them has to learn how to work where there is not gravity. When they are in a spaceship that is moving around the Earth, they can feel as though they do not weigh anything. They are able to float. Many astronauts say that it is fun to float around the inside of a spaceship. Objects in the spaceship can also float, so astronauts can lift and move heavy things easily.

Feeling weightless is fun, but being in space is work for astronauts. Astronauts must be healthy and eat right. They have to exercise and be in good shape. Astronauts have many adventures, but they work hard, too.

*scuba diving: swimming under water with a special suit, air tank, and fins

Sources Used:

European Space Agency (n.d.) Astronaut training. Retrieved from http://www.esa.int/esaKIDSen/SEM3RIWJD1E_LifeinSpace_0.html

Kidzworld (n.d.) Becoming an astronaut. Retrieved from <http://www.kidzworld.com/article/3084-becoming-an-astronaut>

NASA (n.d.) Astronauts answer student questions. Retrieved from: http://www.nasa.gov:centers/Johnson/pdf/569954main_astronaut%20FAQ.pdf

NASA (2011, November 30). What is the International Space Station? Retrieved from: <http://www.nasa.gov/audience/forstudents/k-4/stories/what-is-the-iss-k4.html>

NASA (n.d.) NASA's space exploration vehicle, Retrieved from: http://www.nasa.gov/exploration/technology/space_exploration_vehicle/index.html

Photograph of weightless astronaut (Image Number 4128R-4871). Copyright by Superstock. Used by permission

Source #2

This article describes what happens to astronauts' bodies when they go into space.

Life in Space by Aaron Higgins

Many people say they want to be an astronaut, but do they know what it's really like? When astronauts are in space, they feel weightless. They can float. This sounds like fun, but it is not that simple. The human body is used to being on Earth, but some people stay out in space for months. A lot of strange things happen to the body when it floats for that long.

Astronauts sometimes feel sick in space. It takes a few days for them to get used to feeling weightless and being able to float.

Being in space also changes how blood flows in the body. In space, more blood flows to the astronauts' heads so their faces get puffy and their necks get bigger. At the same time, less blood flows to their legs, making them skinny. They call this condition "bird legs."

To help keep their muscles strong, astronauts have to do exercises when they are in space. They use big rubber bands attached to the walls of the ship and hook them over their shoulders. Then they bend their knees and press against the rubber bands to make their legs stronger.

Even with regular exercise in space, astronauts come back feeling weak. It takes time for them to get back their Earth legs and learn how to live with gravity again.

Sources Used:

Discovery News (2009, May 13). Astronaut [Video File]. Retrieved from <http://news.discovery.com/videos/cool-jobs-astronaut.html>

NASA (2009). When space makes you dizzy. Retrieved from http://www.nasa.gov/audience/forstudents/58/features/F_When_Space_Makes_You_Dizzy.Html

Part 1: ASSESSMENT ITEMS

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

| | Source #1: What Is an Astronaut? | Source #2: Life in Space |
|---|---|-------------------------------------|
| a. Astronauts feel weak when they come back from space. | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Since objects are also able to float in space, astronauts can easily lift things in space that are heavy on Earth. | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Astronauts have a special view of Earth from space. | <input type="checkbox"/> | <input type="checkbox"/> |

2. Gravity is not a factor in spaceships so astronauts float and objects do too. Find one reason why having objects be weightless is an advantage in space and two reasons why being weightless in space may not be an advantage for an astronaut when they return to earth. Support your reasons by identifying the source for each reason.

(Students will be provided with space to answer this question.)

3. Explain why it is fun to be an astronaut. Give **two** reasons from Source #1.

(Students will be provided with space to answer this question.)

4. Explain why it is hard to be an astronaut. Give **two** reasons from Source #1 and one from Source #2. For each reason, include the source title or number.

(Students will be provided with space to answer this question.)

Part 2: Astronauts Opinion Performance Task

1. Student Directions

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

Your Assignment

Your teacher is creating a bulletin board display in the school library to show what your class has learned about different types of jobs. You decide to write an opinion paper that considers if being weightless in space is really fun for astronauts. Your paper will be read by other students, teachers, and parents.

Using more than one source, develop your opinion about whether you think being weightless is fun for an astronaut. Choose the most important information from the sources to support your opinion. Then, write an opinion paper that is several paragraphs long. Clearly organize your paper and support your opinion with details from the sources. Use your own words except when quoting directly from the sources. Be sure to give the source title or number when using details from the sources.

REMEMBER: A well-written opinion article

- has a clear opinion.
- is well-organized and stays on the topic.
- has an introduction and conclusion.
- uses transitions.
- uses details from the sources to support your opinion.
- puts the information from the sources in your own words, except when using direct quotations from the sources.
- gives the title or number of the source for the details or facts you included.
- develops ideas clearly.
- uses clear language.
- follows rules of writing (spelling, punctuation, and grammar usage).

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

1. plan your opinion paper.
2. write your opinion paper.
3. revise and edit the final draft of your opinion paper.

For Part 2, you are being asked to write an opinion paper that is several paragraphs long.

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

(Students will be provided with space to answer this question.)