Student Directions

Astronauts Informational Performance Task

Task:
Your class has been learning about different types of jobs to prepare for your school's job week. Your teacher has asked each person to learn about a different job. You think being an astronaut must be an interesting job so you decide to learn about what it is like to be an astronaut. You have found two sources about being an astronaut.

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 will need to answer the questions and complete your research. You may click on the Global Notes button to take notes on the information you find in the sources as you read. You may also use scratch paper to take notes.

In Part 2, you will write an informational article using information you have read.

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

Research Questions:
After looking at 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 have read and looked at, which should help you write
your informational article.

You may click on the Global Notes button or refer back to your scratch paper to look at your notes when you think it would be helpful. Answer the questions in the spaces below the items.

Both the Global Notes on the computer and your written notes on scratch paper will be available to you in Part 1 and Part 2 of the performance task.

Part 1

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 a 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 space ship 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 no gravity. When they are in a spaceship that is moving around 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.

1 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


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."

The heart is a muscle that pumps blood around the body. The heart does not have to work as hard to
pump blood in space. A muscle that does not work hard gets weaker and smaller. Astronauts' other muscles and their bones can also get weaker. This is because they do not have to work as hard to move the astronaut's body.

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 space 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


### Evidence Statement
The student will select evidence to support opinions based on evidence collected.

### Key Elements:
- Astronauts feel weak when they come back from space: Source #2
- Since objects are also able to float in space, astronauts can easily lift things in space that are heavy: Source #1
- Astronauts have a special view of Earth from space: Source #1

### Rubric:
- (1 point) 3 cells completed correctly.
- (0 points) Fewer than 3 cells completed correctly or blank.
2645

Grade 3

<table>
<thead>
<tr>
<th>Item #</th>
<th>Grade</th>
<th>Claim</th>
<th>Target</th>
<th>DOK</th>
<th>Item Standard</th>
<th>Evidence Statement</th>
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<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>W-1b</td>
<td>The student will select evidence to support opinions based on evidence collected.</td>
</tr>
</tbody>
</table>

**Key Elements:**

**Source #1 (What is an Astronaut?)**
- 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.
- Astronauts train for hundreds of hours.
- 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.

**Source #2 (Life in Space)**
- They have many years of school and special training.
- A lot of strange things happen to the body when it feels weightless and floats for that long.
- Astronauts sometimes feel sick in space.
- Being in space also changes how blood flows in the body.
- 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.”
- The heart does not have to work as hard to pump blood in space. A muscle that does not work hard gets weaker and smaller.

*Continued on next page*
• Astronauts’ other muscles and their bones can get weaker, too.
• Astronauts have to do exercises when they are in space.
• It takes time for them to get back their Earth legs and learn how to live with gravity again.

Rubric:
(2 points) Response is an evidence-based explanation that provides two pieces of evidence from different sources that support this claim and that explain how each example supports the claim. Student cites the source for each example.

(1 point) Response is an evidence-based explanation that provides two pieces of evidence from different sources that support this claim but doesn’t explain how each example supports the claim. Student cites the sources.

OR

Response is an evidence-based explanation that provides two pieces of evidence from a single source that supports this claim and that explains how that example supports the claim. Student cites the source.

OR

Response is an evidence-based explanation that provides only one piece of evidence from a single source that supports this claim and that explains how that example supports the claim. Student cites the source.

OR

Response is an evidence-based explanation that provides two pieces of evidence from different sources that support this claim and that explain how each example supports the claim. Student does not cite sources.

(0 points) Response is an explanation that is incorrect, irrelevant, insufficient, or blank.

Exemplar:
(2 points) It is hard to be an astronaut because living in space is difficult on an astronaut’s body. Astronauts have to do many different things in order to keep themselves healthy. Source #1 says that astronauts must be healthy and eat right. This is important because if they do not stay healthy and eat right, they will not be able to correctly do their job. They can do this by exercising and by being in good shape. Source #2 says that being in space changes how blood flows in the body. Astronauts’ faces can get puffy and their necks can get bigger. This is hard on an astronaut because it changes their body. Astronauts must do special exercises so that their bodies do not become weak.

Continued on next page
(1 point) It is hard to be an astronaut because living in space is difficult on an astronaut’s body. Astronauts have to do many different things in order to keep themselves healthy. Source #1 says that astronauts must be healthy and eat right. This is important because if they do not stay healthy and eat right, they will not be able to correctly do their job. They can do this by exercising and by being in good shape.

(0 points) It is hard to be an astronaut because they have to go to school for a long time, and being weightless messes up their bodies.
<table>
<thead>
<tr>
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<tr>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>W-2b</td>
<td>The student will write full informational texts on a topic, attending to purpose and audience; organize ideas by stating a focus (main idea); include structures and appropriate transitional strategies for coherence; include supporting details (from sources when appropriate to the assignment) and an appropriate conclusion.</td>
</tr>
</tbody>
</table>

**Student Directions**

**Astronauts Informational Performance Task**

**Part 2**
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 informational article on astronauts. Your article will be read by other students, teachers, and parents.

Using more than one source, develop a main idea about being an astronaut. Choose the most important information from the sources to support your main idea. Then, write an informational article that is several paragraphs long. Clearly organize your article and support your main idea 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 informational article**

- has a clear main idea.
- is well-organized and stays on the topic.
- has an introduction and conclusion.
- uses transitions.
- uses details from the sources to support your main idea.
- 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).
Now begin work on your informational article. Manage your time carefully so that you can

1. plan your informational article.
2. write your informational article.
3. revise and edit the final draft of your article.

Word-processing tools and spell check are available to you.

For Part 2, you are being asked to write an informational article that is several paragraphs long. Type your response in the box below. The box will get bigger as you type.

Remember to check your notes and your prewriting/planning as you write, and then revise and edit your informational article.
## Grade 3

### 4-Point Informational Performance Task Writing Rubric (Grades 3-5)

<table>
<thead>
<tr>
<th>Score</th>
<th>4</th>
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</thead>
</table>
| **Organization/Purpose** | The response has a clear and effective organizational structure, creating a sense of unity and completeness. The organization is sustained between and within paragraphs. The response is consistently and purposefully focused:  
- controlling/main idea of a topic is clearly communicated, and the focus is strongly maintained for the purpose and audience  
- consistent use of a variety of transitional strategies to clarify the relationships between and among ideas  
- effective introduction and conclusion  
- logical progression of ideas from beginning to end; strong connections between and among ideas with some syntactic variety | The response has an evident organizational structure and a sense of completeness. Though there may be minor flaws, they do not interfere with the overall coherence. The organization is adequately sustained between and within paragraphs. The response is generally focused:  
- controlling/main idea of a topic is clear, and the focus is mostly maintained for the purpose and audience  
- adequate use of transitional strategies with some variety to clarify the relationships between and among ideas  
- adequate introduction and conclusion  
- adequate progression of ideas from beginning to end; adequate connections between and among ideas | The response has an inconsistent organizational structure. Some flaws are evident, and some ideas may be loosely connected. The organization is somewhat sustained between and within paragraphs. The response may have a minor drift in focus:  
- controlling/main idea of a topic may be somewhat unclear, or the focus may be insufficiently sustained for the purpose and/or audience  
- inconsistent use of transitional strategies and/or little variety  
- introduction or conclusion, if present, may be weak  
- uneven progression of ideas from beginning to end; and/or formulaic; inconsistent or unclear connections between and among ideas | The response has little or no discernible organizational structure. The response may be related to the topic but may provide little or no focus:  
- controlling/main idea may be confusing or ambiguous; response may be too brief or the focus may drift from the purpose and/or audience  
- few or no transitional strategies are evident  
- introduction and/or conclusion may be missing  
- frequent extraneous ideas may be evident; ideas may be randomly ordered or have an unclear progression | Insufficient (includes copied text)  
- In a language other than English  
- Off-topic  
- Off-purpose |
<table>
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<tbody>
<tr>
<td><strong>Evidence/Elaboration</strong></td>
<td>The response provides thorough elaboration of the support/evidence for the controlling/main idea that includes the effective use of source material. The response clearly and effectively develops ideas, using precise language:</td>
<td>The response provides adequate elaboration of the support/evidence for the controlling/main idea that includes the use of source material. The response adequately develops ideas, employing a mix of precise and more general language:</td>
<td>The response provides uneven, cursory elaboration of the support/evidence for the controlling/main idea that includes uneven or limited use of source material. The response develops ideas unevenly, using simplistic language:</td>
<td>The response provides minimal elaboration of the support/evidence for the controlling/main idea that includes little or no use of source material. The response is vague, lacks clarity, or is confusing:</td>
<td>Insufficient (includes copied text)</td>
</tr>
<tr>
<td></td>
<td>• comprehensive evidence (facts and details) from the source material is integrated, relevant, and specific</td>
<td>• adequate evidence (facts and details) from the source material is integrated and relevant, yet may be general</td>
<td>• some evidence (facts and details) from the source material may be weakly integrated, imprecise, repetitive, vague, and/or copied</td>
<td>• evidence (facts and details) from the source material is minimal, irrelevant, absent, incorrectly used, or predominantly copied</td>
<td>In a language other than English</td>
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<td></td>
<td>• clear citations or attribution to source material</td>
<td>• adequate use of citations or attribution to source material</td>
<td>• weak use of citations or attribution to source material</td>
<td>• insufficient use of citations or attribution to source material</td>
<td>Off-topic</td>
</tr>
<tr>
<td></td>
<td>• effective use of a variety of elaborative techniques*</td>
<td>• adequate use of some elaborative techniques*</td>
<td>• weak or uneven use of elaborative techniques*; development may consist primarily of source summary</td>
<td>• minimal, if any, use of elaborative techniques*</td>
<td>Off-purpose</td>
</tr>
<tr>
<td></td>
<td>• vocabulary is clearly appropriate for the audience and purpose</td>
<td>• vocabulary is generally appropriate for the audience and purpose</td>
<td>• vocabulary use is uneven or somewhat ineffective for the audience and purpose</td>
<td>• vocabulary is limited or ineffective for the audience and purpose</td>
<td></td>
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<tr>
<td></td>
<td>• effective, appropriate style enhances content</td>
<td>• generally appropriate style is evident</td>
<td>• inconsistent or weak attempt to create appropriate style</td>
<td>• little or no evidence of appropriate style</td>
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</table>

*Elaborative techniques may include the use of personal experiences that support the controlling/main idea*
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<th>2</th>
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</table>
| Conventions | The response demonstrates an adequate command of conventions:  
- adequate use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling | The response demonstrates a partial command of conventions:  
- limited use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling | The response demonstrates little or no command of conventions:  
- infrequent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling | • Insufficient (includes copied text)  
• In a language other than English  
• Off-topic  
• Off-purpose |

Holistic Scoring:  
- **Variety**: A range of errors includes sentence formation, punctuation, capitalization, grammar usage, and spelling.  
- **Severity**: Basic errors are more heavily weighted than higher-level errors.  
- **Density**: The proportion of errors to the amount of writing done well. This includes the ratio of errors to the length of the piece.