



Space Food by Lisa Lugo

Grade Level: Grade 4

Subject Area: English Language Arts

Lesson Length: 2 hours 15 minutes

Lesson Keywords: reading, writing, vocabulary, space, food, health

Lesson Description: The goal of this lesson is to teach students about the food astronauts bring into space, why they bring the specific food, and how they keep their kitchen's clean. By reading the passage closely and using critical thinking skills, students should be able to rationalize the types of food an astronaut could bring to space and why.

Common Core Standards Covered with This Lesson

CCSS.ELA-Literacy.RL.4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-Literacy.RL.4.4: Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).

CCSS.ELA-Literacy.W.4.1b: Provide reasons that are supported by facts and details.

CCSS.ELA-Literacy.W.4.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA-Literacy.W.4.2b: Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

CCSS.ELA-Literacy.W.4.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-Literacy.L.4.4a: Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.

Lesson Content: Book/Story/Reading Passage

Instructions: Please read the following reading passage as many times as needed (aloud and silent) before starting to go through other lesson pages. Understanding the content of this passage is very important since the lesson activities will be all about this content. Feel free to print the passage if needed.

Space Food

by

Content: You really know how important a clean kitchen is if you live in the same small place for weeks. Everyone needs to have a clean kitchen so they are healthy. A dirty kitchen can make people sick. Astronauts are people who travel on space ships. They need to have a very clean home. They travel far from Earth. We need clean kitchens everywhere on earth and in space.

Astronauts have to solve two problems: how to get food and how to keep their spaceship clean. They need to solve them in order to stay alive. They are in a spaceship far from Earth, and they need to take care of everything themselves. They need to be sure they have what they need to live there, because the astronauts may be in space for weeks.

Here is how they solved the food problem. At first, the astronauts took tubes of food with them into space. They would squeeze a tube and eat semi-liquid food. It did not taste great, but since they did not need to take dishes or silverware with them, they had no dishes to wash.

Today's spaceships have a bigger menu. Astronauts can eat from bowls. In fact, they take cereal and other standard foods with them. The foods are packaged in special containers to keep them fresh. They use knives, forks, and spoons. One unusual item on their table is a pair of scissors. They use the scissors to open the food packages. They can eat right from the package.

They have a kitchen on the spaceship. Its oven can heat food to 170 degrees. The kitchen has water and sets of meals that come on trays. The astronauts choose their menu before they go into space. They take a lot of food with them.

The astronauts keep bread and fresh fruits and vegetables in a special food locker. Most flights take tortillas. They package the tortillas in an oxygen-free wrap so they stay safe.

How do they keep the kitchen clean? They do not have to worry about mice or other rodents. They make sure that there are no rodents before the ship leaves. But sometimes mice travel on the ship. Those mice are part of experiments. They live in cages.

How do astronauts keep their trays clean? That is another health problem the astronauts solve. They need to stay healthy in space. To carry a lot of water to wash trays would be a lot of extra weight. They pack wet wipes in plastic bags. They use them to clean trays. So, their kitchen is clean and they stay healthy.

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Task 1: Vocabulary

Instructions: Please complete the following vocabulary activity by choosing the correct meaning of each word selected from the passage and use of each word correctly in a sentence.

Q: 1 WordPhrase: semi-liquid **WordPhraseTier:** 3

Question: "They would squeeze a tube and eat semi-liquid food." What does the word "semi-liquid" mean in this sentence?

- A: water
- B: partially liquid and partially solid
- C: solid
- D: liquid

Question: Which one of the sentences below uses the word "semi-liquid" correctly?

- A: The hot dog was semi-liquid.
 - B: Mash potatoes is semi-liquid since it is not a hard potatoe any more.
 - C: All water is semi-liquid.
 - D: The swimming pool was semi liquid in the heat of summer.
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Q: 2 WordPhrase: unusual **WordPhraseTier:** 2

Question: "They use knives, forks, and spoons. One unusual item on their table is a pair of scissors." What does the word \"unusual\" mean in this sentence?

- A: Usual
- B: Not Wanted
- C: Out of place
- D: Ordinary

Question: Which one of the sentences below uses the word "unusual" correctly?

- A: The cup was unsual and matched all of the cups in the cabinate.
 - B: The hot sun was unusual for the middle of summer.
 - C: The teacher looked like every other teacher in the school, it was unusual.
 - D: It was unusual that Sam was late because he had perfect attendance all of last year.
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Q: 3 WordPhrase: tortillas **WordPhraseTier:** 2

Question: "Most flights take tortillas. They package the tortillas in an oxygen-free wrap so they stay safe." What does the word "tortillas" mean in this sentence.

- A: A type of food
- B: An animal
- C: A tool
- D: A special bag.

Question: Which one of the sentences below uses the word "tortillas" correctly?

- A: My mother made use soft tacos with tortillas and chicken.
 - B: The tortillas cleaned up the mess on the window.
 - C: I put my pencils in my tortillas.
 - D: The tortillas were useful to pick up a toy.
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Q: 4 WordPhrase: experiments **WordPhraseTier:** 3

Question: "Those mice are part of experiments. They live in cages." What does the word "experiments" mean in this sentence?

- A: A place to store things.
- B: A book.
- C: A scientific test.
- D: A way to eat things.

Question: Which one of the following sentences below uses the word "experiments" correctly?

- A: We put the book back in the experiments.
 - B: We had to use the experiment to make a sandwich.
 - C: The experiments was a long book.
 - D: For science we had to do an experiment to see how plants grew best.
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Task 2: Forum Discussion

Instructions: This discussion forum will have questions for students to respond. Read the posted questions, and respond to each. Students are responsible for posting one initial and two peer responses for each topic.

1 - What would you bring?

What kind of food would you bring on a space ship that would be easily eaten in space?

2 - Why do you think mice are on the space ship in cages?

Respond below as to why you think astronauts would bring mice on a space ship.

3 - Why would astronauts not bring...

Respond below as to why you think astronauts would not bring messy foods on the space ship.

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Task 3: Writing Activity

Instructions: You are to write and post here 500 words essay on what food you would bring, and why would you bring that food if you were an astronaut going to space. Use some of your new vocabulary words from the passage when writing your response.

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