

# Boredom Busters Bitez

A stylized illustration of a satellite in space. The satellite is a grey rectangular structure with several blue solar panel arrays extending from it. It is positioned above a stylized Earth with green continents and blue oceans. A bright orange sun is rising on the right side of the Earth, with yellow rays emanating from it. The background is a dark space filled with small white stars.

## LIVING IN OUTER SPACE

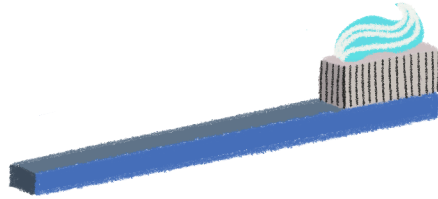
Today's theme is all about living in outer space! Astronauts and scientists are looking for ways to live in space. Living in space is very different from living on Earth. Astronauts are working hard discovering new ways to live in space. One day entire cities, towns, and villages might exist in space. Or even on other planets and in other galaxies!

Today's fun includes new ways astronauts do everyday tasks, creating a space grocery shopping list, building a space town, and planning a space garden!

# Space Living

**Living in outer space is not like living on Earth. Astronauts created clever answers to these odd problems. Everyday tasks like brushing teeth, exercising, and sleeping are done differently in space.**

Space doesn't have gravity. Gravity keeps us on the ground. Without gravity astronauts float around. It also makes everything else float around too!



Brushing teeth in space is a little challenging. There are no sinks in space because there is no running water. Water doesn't flow in space like it does on Earth. In space water stays together in blobs called "beads." Astronauts use a little bit of water from a bottle to wet their brushes. They use the same toothbrushes and toothpastes as they do on Earth. But they need to be careful when they put the paste on their brush. If they do it wrong the paste will float away! When they are done brushing their teeth they can't spit the toothpaste into a sink. So they swallow it instead!



Exercising in space is different too! Exercise is very important for astronauts! Astronauts float around all day so they don't work out their muscles much. Astronauts can't go outside to run around and play like people do on Earth.

They have to stay inside to exercise. One way astronauts work out is by running on a treadmill. They are attached to the treadmill with bungee cords so they do float away! Even sweating in space is different! When astronauts work up a sweat it doesn't drip down their faces like it does on Earth. In space the sweat just stays on their face until the astronaut wipes it off.



Sleeping is also very different in space! Astronauts sleep in sleeping bags. The sleeping bags are attached to a wall in a little room so the astronauts don't float around the Space Station. Without gravity astronauts can sleep in any position they want! Time is also different in space. There are no days and nights in space like there is on Earth. But have no fear! Astronauts in the International Space Station still see the sun rise and set on Earth. Astronauts floating around the Earth see the sunset and sunrise 16 times within one day!



Living in space is very different than living on Earth. Learning how to do things differently is hard sometimes. But that's what makes it exciting!



# Grocery Shopping in Space



Grocery shopping in space is not easy. All of the food in space is sent from Earth. A package with food is sent to astronauts every few months. This package is filled with lots of prepackaged foods, fruits, and vegetables. Astronauts make grocery lists of the meals and foods they want from Earth.

Most of the meals sent to space are dehydrated. Dehydrated foods are foods that had all of the water removed from them. This makes the meals last longer without a refrigerator. Astronauts cook the meals by adding water to them.

Below is a list of some of the foods that are sent to space!

Pretend you're an astronaut at the International Space Station. Write down your own space grocery shopping list below.

## GROCERIES

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Avocados

Oranges

Almonds

M&Ms

Macaroni & Cheese

Scrambled Eggs

Mashed Potatoes

Chicken a la King

Ham

Ketchup

Powdered Milk

Cream of Mushroom Soup

Cereal

Tomatoes & Eggplant

Beef with Mushrooms

## GROCERIES

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**Note: Remember cooking is limited in space. Most meals need to be made on Earth first, and then reheated in space.**

# Stellar Space Cities

One day humans will be able to live on other planets. Other planets are very different than Earth. This means cities are going to look different than the ones on Earth too! Answer the questions below to create your own space city!

**What is the name of your city?**

**What planet is your city on?**

**Is there gravity?**

**What's the weather like?**

**What kind of food is there?  
Is it made on the planet?**

**Are there plants in your city?  
If so, what kinds?**

**Are there animals in your city?  
If so, what kinds?**

**What do homes in your city  
look like?**

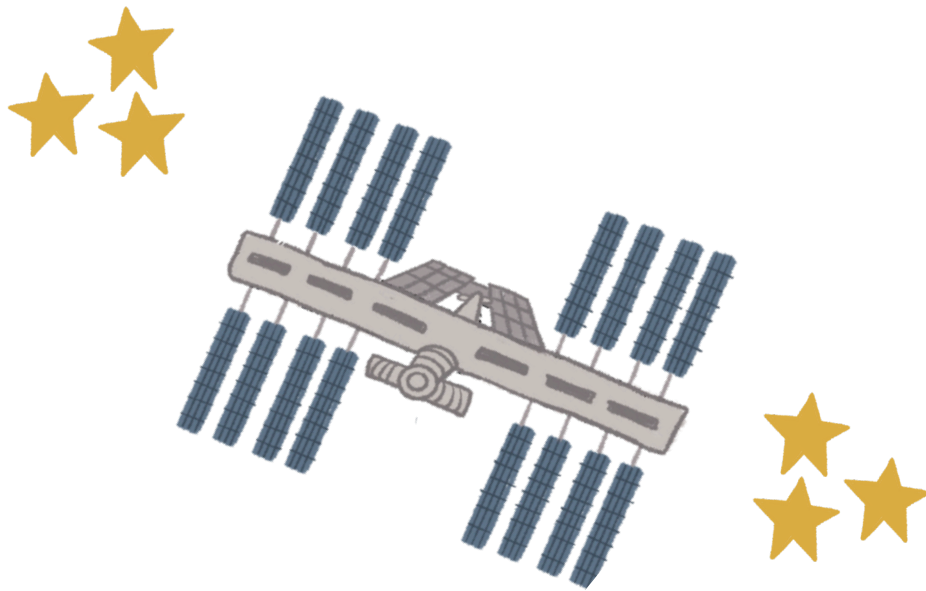
**How do people in your city  
travel?**

# Galaxy Gardens

Astronauts and scientists are learning how to grow plants in space. Growing plants in space is hard. Plants need sunlight, water, nutrients, and air. These are hard to find in space. Scientists and astronauts are working on creating special gardens to grow plants in space. These gardens are inside instead of outside. Plants grow in trays of soil instead of in the ground. Lights are placed above the plants to act like the sun.

What plants would you grow in your space garden?  
Draw and label your plants below!





**Boredom Busters Bitez is an extension of our previous publication, Boredom Busters. Instead of one large publication, we will release three different Boredom Buster activities. Each issue is a different theme!**

**For more resources and activities for children, please visit [buckslib.org](http://buckslib.org)**

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