

SNOOPY AND NASA

Celebrating the Space Station

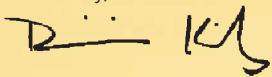
Dear Educator,

Gaze at the stars and into the future while honoring the past as you and your students join Snoopy — a seasoned space traveler — in celebrating the 20th anniversary of humans living on the International Space Station! Students will learn about the history of the space station and what life is like for astronauts who live and work in space.

Developed by the curriculum specialists at Young Minds Inspired as part of a unique partnership between NASA and Peanuts Worldwide, these easy-to-implement activities for students in grades K-2 are standards-based and designed to provide teachers with engaging lessons to complement their language arts and STEM curricula. The lessons can be taught remotely or in the classroom, and each activity includes extension suggestions the whole family can enjoy.

Please share this program with other K-2 teachers at your school. And let us know your opinion of the program by visiting ymiclassroom.com/feedback-snoopy-iss. We look forward to your comments and suggestions.

Sincerely,



Dr. Dominic Kinsley
Editor in Chief
Young Minds Inspired

Program Objectives

- Fuel STEM learning and interest in space
- Raise awareness of the 20th anniversary of humans living on the International Space Station and instill enthusiasm for space exploration and future NASA endeavors
- Reinforce language arts and STEM skills

Target Audience

Students in grades K-2 and their families

How to Use This Program

Download, photocopy, and distribute the three reproducible activity sheets to all students, or share the PDFs through your school's digital platform if you're connecting with students remotely. Prepare the materials for each activity and preview videos in advance. Have students share their completed sheets with their families so that they can do the activities at the bottom of each sheet together. You can also share the program link with parents to do the activities with their children. Visit ymiclassroom.com/snoopy-iss for standards alignment.

**Activity 1
Happy Anniversary, Space Station!**

In this activity, students learn fun facts about the space station and celebrate the 20th anniversary of humans living in space.

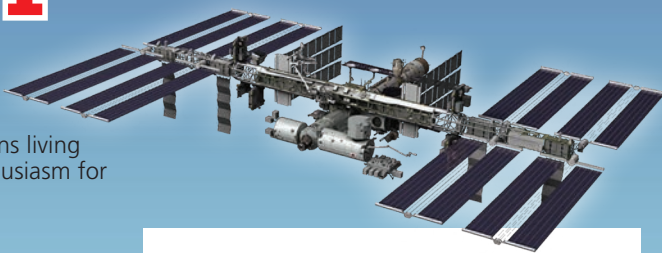
Materials needed: Pencils, activity sheet, crayons or markers

Ask students to “twinkle their fingers” (arms in the air, fingers spread wide and wiggling) if they like looking at the stars at night. Have they ever seen a star moving? If so, it might have been the International Space Station!

Explain that the International Space Station is a spacecraft designed for humans to live in space for a long time. The average amount of time an astronaut spends on the space station is six months. Some have made multiple visits and have logged more than 365 days working, eating, exercising, and even playing on the space station. November 2 will mark the 20th anniversary of humans living on the space station.

The people who live and work on the space station are from all over the world. As of June 2020, 240 people from 19 different countries have lived there, most of them from the United States and Russia. Three to seven crew members are on board at all times.

Even Snoopy has visited the International Space Station! In 2019, a plush Snoopy doll donned a helmet and space suit to float around the space station with astronauts Jessica Meir and Christina Koch. And in the first season of Apple TV+'s animated series *Snoopy in Space*, Snoopy and Woodstock take a trip



Fun Facts about the International Space Station!

- ★ The International Space Station is celebrating its 20th anniversary of humans living in space on November 2, 2020.
- ★ The space station circles the Earth approximately 250 miles above the surface.
- ★ As of June 2020, 240 individuals from 19 countries have visited the space station.
- ★ The space station is 357 feet from end to end. That's just three feet shorter than an American football field (including the end zones).
- ★ Up to eight spacecraft can connect to the space station at any time.
- ★ The space station travels about 5 miles per second.
- ★ It takes about 90 minutes for the space station to orbit the Earth.
- ★ In a 24-hour period, the space station orbits Earth 16 times, which means astronauts can see 16 sunrises and sunsets in one day.
- ★ Astronauts on the space station have conducted more than 220 spacewalks... and counting!
- ★ The space station has hosted more than 3,000 scientific investigations from researchers in more than 100 countries.
- ★ Astronauts on the space station must exercise at least two hours per day to prevent bone and muscle loss.



to the space station and find out what it's like to live in space.

Ask students to stand for a "Fun Facts" game. Explain that you will tell them a "fun fact" about the space station. They must decide if it's true or false. If they think it's true, they should "twirl for true". If they think it's false, they should "flap their arms for false". Read the statements in the "Fun Facts" box on page 1. The fun part of the game comes at the end, when students find out all the facts are true!

Pass out the activity sheet and help students complete the simple cryptogram to reveal a message from Snoopy to the astronauts on the space station. Then have students create their own "Happy Anniversary" cards. Older students may wish to write a personal message on the card in addition to coloring it. Younger students might draw a picture. Use the cards to decorate a classroom bulletin board celebrating the International Space Station, or have students show their cards to each other online during a remote video session.

Answer: Happy 20th Anniversary!

Extension Activity: Ask students to brainstorm questions they would like to ask an astronaut. Then review the information at nasa.gov/centers/johnson/pdf/569954main_astronaut%20FAQ.pdf to see if any of their questions have been answered.

Activity 2 Life on the Space Station

Students will watch a few short videos about the everyday life of crew members on the space station. Then they will step into Snoopy's space boots and imagine what his life was like when he was aboard the space station in the Apple TV+ series *Snoopy in Space*.

Materials needed: Pencils, activity sheet, crayons or markers; access to online videos

Ask students to share the things they do in a typical day. For example, what do they do in the morning before school? What is something they do during the day? What about when they go to bed at night? Then ask them to imagine how crew members aboard the International Space Station do everyday activities. How are they the same? How are they different?

Part 1: Show students the following four short videos and discuss the content as you view them.

- youtube.com/watch?v=uljNfZbUYu8 (washing hair)
- youtube.com/watch?v=AZx0RIV0wss (eating)
- youtube.com/watch?v=_ikouWcXhd0 (exercising)
- youtube.com/watch?v=UyFYgeE32f0 (sleeping)

Pass out the activity sheet and have students answer the questions, working in pairs or individually. **Answers:** C, B, C, A

Part 2: Now tell students that Snoopy didn't just visit the space station in the Apple TV+ series *Snoopy in Space*; he has also been there as a guest of astronaut Mike Massimino. Astronauts get to bring a few personal items with them to the space station. Mike brought a plush Snoopy doll with a helmet that his brother had given him as a kid.

Ask students to imagine that they are going to the space station and get to bring one thing with them. The item must fit into a shoebox. Have them write a description and/or draw a picture of their item on the back of the activity sheet.

Extension Activity: Using what they have learned about the International Space Station, ask students whether they would like to travel to and live on the space station, and explain why or why not. Older students could write a short persuasive paragraph that includes facts from the videos and "Fun Facts" they learned from Activity 1.

Activity 3 Working in Space

Students learn about what it takes to be an astronaut and the skills needed to live and work on the International Space Station.

Materials needed: Pencil, paper, crayons or markers

Ask students to think about and share some of the things they've learned how to do in the past year that they couldn't do before, such as reading with ease, counting by twos, writing, etc. Explain that these are examples of things they need to know to do their job as a student.

Different jobs require knowing how to do different things. Can students name skills that a firefighter needs? What about a teacher? Explain that these jobs also require certain personality traits such as bravery and patience.

Read the list of skills and traits below to the students. Have them give a thumbs up if they think they are important for an astronaut, and a thumbs down if not.

- Good with tools
- Likes math and science
- Good at following directions
- Plays the piano
- Swims well
- Good at leading
- Good at learning new things
- Is patient
- Is a team player
- Likes adventure
- Is brave
- Gives up easily
- Is extremely healthy
- Has a college degree
- Dislikes small spaces



Pass out the activity sheet and read the introduction together. Based on your discussion, do students think they could do the job of an astronaut? What kinds of things would they have to learn to become an astronaut? Have students draw a picture of themselves as an astronaut in space. Older students may write a sentence or two about how their personal skills and talents could help them become an astronaut in the future.

Extension Activity: Ask students to invent a new tool or resource they think would be useful to astronauts on the space station. It might be a new food, exercise equipment, a tool to help with experiments, etc. They can draw and/or write about the tool. If you have recyclables and/or craft materials in your classroom, have students create a mock-up of the resource or tool.

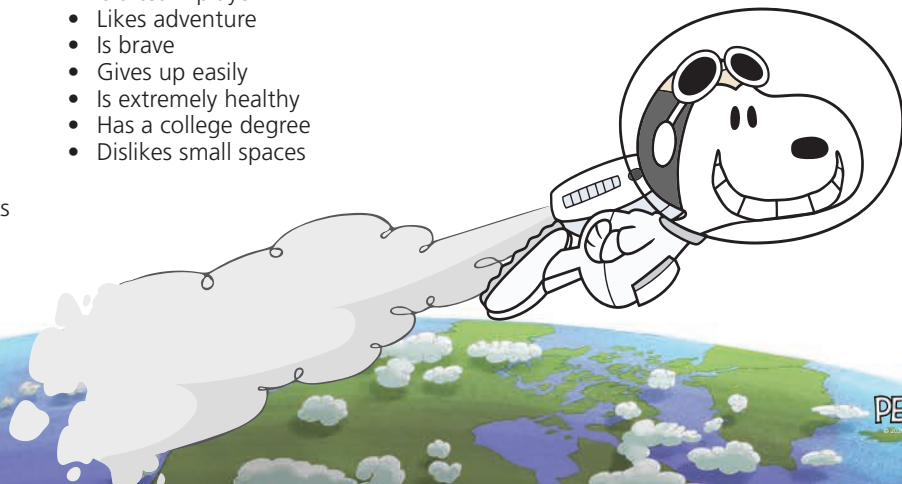
International Space Station Anniversary Events

Tune into nasa.gov for special anniversary events, including:

- Special messages from the astronauts
- Storytime with the astronauts
- 70th anniversary of Peanuts comic strip (October 2)

Resources

- apple.co/snoopyinspace
- nasa.gov/mission_pages/station/main/index.html
- nasa.gov/sites/default/files/atoms/files/iss20_20_continuous_years.pdf
- ymiclassroom.com/snoopy-iss



Happy Anniversary, Space Station!

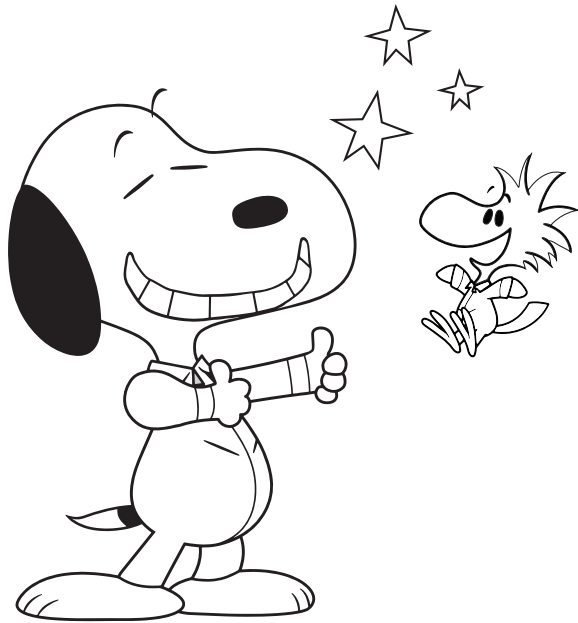
Part 1: Snoopy loves the International Space Station. He wants to send the crew a message to help them celebrate a special day. Can you solve the puzzle to read Snoopy's message? Use the letter chart below. Then write the letter on the line above each number.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

 A
 Y **20**
 A
 E
 A
 Y!

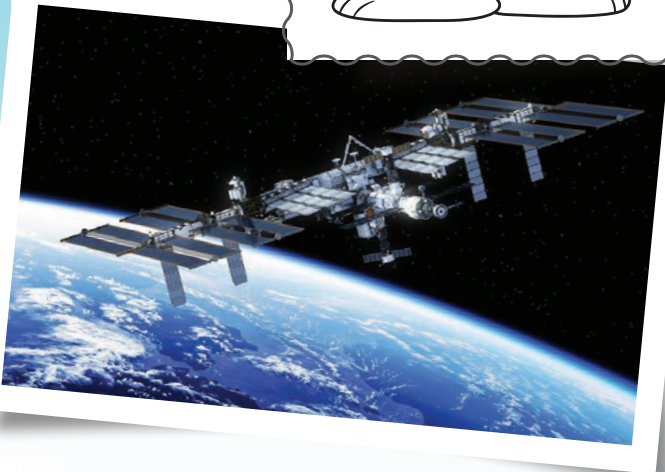
8 1 16
16 25
20 8
1 14 14
9 22
5 18 19
1 18 25

Part 2: Now it's your turn to send best wishes to the space station! Color the picture at right, and write a message to the astronauts on the space station.



A message to the
International Space Station!

From, _____



For Families: What a view! The International Space Station has a special spot for Earth-gazing. See it for yourself as Commander Suni Williams gives you a tour at [youtube.com/watch?v=jbZ71D1VeIo](https://www.youtube.com/watch?v=jbZ71D1VeIo). For more space fun, watch *Snoopy in Space* together on Apple TV+, on the Apple TV app, or via apple.co/snoopyinspace.

Life on the Space Station

If you watch *Snoopy in Space* on Apple TV+, you already know that Snoopy and Woodstock have visited the space station. Can you imagine what that was like?

Part 1: Think about the videos you watched about life on the space station. Then answer the questions below. Circle the letter for your answer.

- How would Snoopy wash his fur on the space station?
 - In the shower
 - With a hose
 - With a wet towel
- What is something Snoopy probably ate on the space station?
 - Graham crackers
 - Tortilla with peanut butter
 - Bread with peanut butter
- Exercise is important! How could Snoopy exercise on the space station?
 - Play golf
 - Play basketball
 - Run on a treadmill
- How did Snoopy sleep at the end of a busy day?
 - In a sleeping bag tied to a wall
 - By floating in a bedroom
 - On a dog bed



Part 2: Imagine you are going to the space station. You get to bring one thing with you. It must be small enough to fit in a shoebox. Draw a picture and write about what you would bring at right.

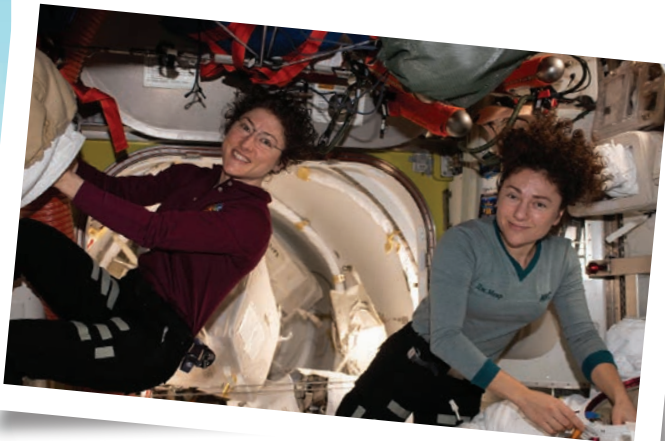
For Families: The space station is a great example of international cooperation. It is an orbiting lab and a home for astronauts from around the globe. As a family, visit nasa.gov/audience/foreducators/stem-on-station/dayinthelife to learn about everyday life on the space station. And watch *Snoopy in Space* on Apple TV+, on the Apple TV app, or via apple.co/snoopyinspace to learn about Snoopy's space station adventure.

Working in Space



Snoopy knows what it takes to be an astronaut! Think about the list of skills your class talked about. Astronauts on the space station like math and science. They like adventure. They are team players and so much more.

Think about some of the things you are good at. How could those skills help you become an astronaut? Write about it below and draw a picture of yourself as an astronaut!



For Families: Look to the night sky and you just might be able to see the International Space Station! Visit spotthestation.nasa.gov to find out when the space station will be traveling by your neighborhood! For more space fun, watch *Snoopy in Space* together on Apple TV+, on the Apple TV app, or via apple.co/snoopyinspace.