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# Living and Working in Space



Nicole Sipe

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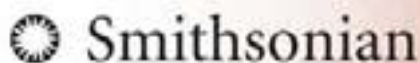
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# Out of This World

Bzzzz! Your alarm goes off, singing its familiar wake-up song. You open your eyes, yawn, and stretch your arms. It's time to start another day.

You unstrap yourself from your sleeping bag and float over to the bathroom. You grab your toothbrush, toothpaste, and a small bag of water that sticks to the wall with Velcro®. You squeeze a bit of water from the bag, but it slowly floats away from you.

“Not again!” you say. Fortunately, the **rogue** droplet doesn't get very far. You catch it and watch as it seeps into the toothbrush bristles. Success! Very carefully, you squeeze a bit of toothpaste onto your brush. It stays put. Yes! Maybe, just maybe, you're starting to get the hang of this **microgravity** thing.



Astronaut Clayton Anderson watches a water droplet float.

Floating water (and floating everything) is just one of the many challenges astronauts face when they are living and working in space. When people are hundreds of kilometers from Earth, things work a little—sometimes a lot—differently!

The first astronauts in space only stayed for a short time to explore and do experiments. But now, scientists have the technology to send astronauts into space for over a year. Astronauts have everything they need to live and work in space.



Astronaut Samantha Cristoforetti drinks from a food packet.



Flight engineer Karen Nyberg demonstrates how fruit floats.

Astronauts are up to 5 centimeters (2 inches) taller in space because gravity does not put as much pressure on their spines.

# The Right People for the Job

There is an old saying: “It’s a tough job, but someone has to do it.” This can apply to living and working in space. Living in space might sound like it would be a dream come true. Who wouldn’t want to eat breakfast while floating 385 kilometers (240 miles) above Earth? But living in space is a lot of work. It can take up to two years of training and physical fitness before a person is ready for this important job.

The men and women who train to become astronauts are called astronaut **candidates**. Many people apply for this **coveted**, or desired, position. Very few are chosen. How few? The last time a call was put out for astronaut candidates, more than 18,000 people applied, but only 12 were chosen. Those are some tough odds!

The people who are chosen to be astronauts are the best of the best in their fields. They come from different career backgrounds. Some are teachers, engineers, scientists, or doctors before they become astronauts. However, to be chosen, they all need degrees in science, technology, engineering, or math.



NASA is the U.S. government agency that runs the country’s space program. It stands for National Aeronautics and Space Administration.

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