



Canadian Space Exploration

Answer the following questions in complete sentences.

1. When was Julie Payette selected to join Canada's astronaut program? What is her job?
2. Which Canadian has been on two missions with NASA, one in 1984 as a payload specialist and the second as a mission specialist in 1996?
3. In what year was the Canadian Astronaut program established? How many astronauts did Canada have as of March 1996 (when this article was published)?
4. Which Canadian's motto is "Anything is worth doing is worth doing well."
5. Who was selected to be the mission specialist training at the Johnson Space Centre in 1995?
6. Which Canadian flew aboard shuttle flight STS-52 in 1992?
7. Who was the first Canadian to fly mission specialist in Houston in 1995?
8. Who served as backup payload specialist to Steve Maclean in 1992?

Answer Key



Canadian Space Exploration

Answer the following questions in complete sentences.

1. When was Julie Payette selected to join Canada's astronaut program? What is her job?

June 1992, computer researcher specializing in voice and speech application

2. Which Canadian has been on two missions with NASA, one in 1984 as a payload specialist and the second as a mission specialist in 1996?

Marc Garneau

3. In what year was the Canadian Astronaut program established? How many astronauts did Canada have as of March 1996 (when this article was published)?

1983, seven

4. Which Canadian's motto is "Anything is worth doing is worth doing well."

Bob Throck

5. Who was selected to be the mission specialist training at the Johnson Space Centre in 1995?

Dave Williams

6. Which Canadian flew aboard shuttle flight STS-52 in 1992?

Steve MacLean

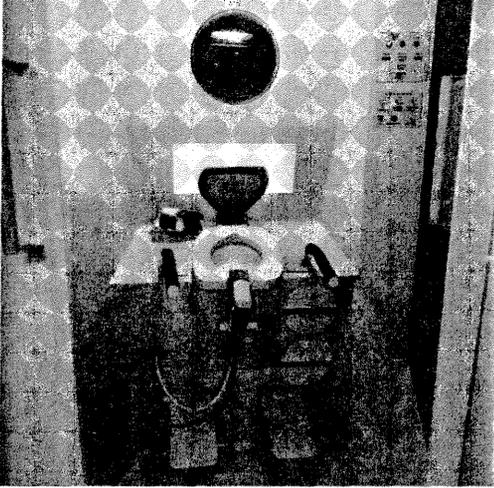
7. Who was the first Canadian to fly mission specialist in Houston in 1995?

Chris Hadfield

8. Who served as backup payload specialist to Steve Maclean in 1992?

Einar Tryggvason

Space Stuff: Did You Know?



The Question Everyone Asks!

During early space missions astronauts used to catch body wastes with adhesive tape! Now it is a much less sticky situation.

The question astronauts hear most is, “How do you use the toilet on the space shuttle?” The answer is that it isn’t simple. The toilet has to have foot, thigh and hand holds to keep the astronauts from floating away! And it doesn’t flush. Instead, each astronaut has a device that fits at the end of a vacuum. Liquid waste is sucked away and then pumped into a waste-water tank. A fan pulls the solid waste out. Then it is dried and disinfected. Well, you did ask!

Sleep Tight!

Zero gravity means sleeping is more than a little tricky. You can’t really lay your head down when you don’t know which way is up, and your blanket is likely to drift off before you do. Imagine trying to get to sleep when you’re strapped into your bed with a head restraint, mask, and earplugs!

Well, that is exactly how astronauts sleep. Some astronauts like to float free in the shuttle to sleep, gently bouncing off a wall once in a while. What’s worse, while they’re travelling in space they pass through several sunrises and sunsets, so it’s hard to tell if it is day or night.

How relaxing!

The Soup is Loose

Astronauts have to be careful eating in space because their food can float away. Spills onboard can be a big problem. If someone shouts, "The soup is loose!" everyone rushes to catch it. Floating food can be dangerous because it can end up in someone's eye, nose or ear, ruin experiments and knock out power.

Sticky foods are the best. Crumbly food isn't sent to space. Can you imagine crumbs floating around in the shuttle? It would be like being in a dust storm all the time! Many foods are dehydrated so they weigh less and take up less room. Water is added as needed. Astronauts can add hot water for hot food, but there is no refrigerator on the shuttle, so no cold drinks.

Rub-A-Dub-Dub

After a long, hard day's work the astronauts might look forward to a shower, but they can't find one in space. So how do crew members keep clean?

Sponge baths. Or towel baths, really. Trying to use as little water as possible, they soak a towel with a water gun and use it to get wet. Then they soak another towel with soapy water from a body rinse bag to wash themselves. The body rinse bag looks like a regular drinking water bag - so the astronauts try not to get confused! Another wet towel rinses off the soap and the bath is complete.

To clean hair, astronauts use a wet, rinseless shampoo. They apply the shampoo, taking care not to stir up soap bubbles, which would be difficult to get out of the air. The astronauts have learned not to bother spending much time combing their hair. In micro-gravity, hair quickly floats out of place.

They can brush their teeth the regular way, but have to be careful that toothpaste-globs don't drift away.

Space Stuff

3.

After reading “Space Stuff” found on pages 6 and 7 of your *Readings Booklet*, identify and record information **facts** in the chart below.

4 marks

Complete every box.

| | Fact that makes me want to go to space | Fact that makes me want to stay home |
|----------------------------|--|--------------------------------------|
| The Question Everyone Asks | • | • |
| Sleep Tight | • | • |
| The Soup Is Loose | • | • |
| Rub-a-Dub-Dub | • | • |

