

## Brains On (APM) | Brains On! Space: The ultimate intergalactic game show 01GHVXVJ2B0N95RHS0QGXB2Q03

SUBJECT 1: You're listening to *BrainsOn!* where we were serious about being curious.

**SUBJECT 2:** *Brains On!* is supported in part by a grant from the National Science Foundation.

**SUBJECT 3:** Welcome, Earth creatures. Take a deep breath--

[DEEP INHALE]

--because we are about to travel into the deep, glorious mysteries of space. Count with me now. 5, 4, 3, 2, 1.  
Watch the world shrink below us as we blast into the sky.

(SINGING) Dance across the Karman line 62 miles high. Chase the James Webb telescope circling around the sun.  
Snapping pics of the universe when it was still young. Now climb up Jacob's Ladder, leap from star to star.

Squint at rosy Betelgeuse, Orion's bow, and [INAUDIBLE] Right up here as it burns back to Earth. I am a shooting star.

**MOLLY:** You're listening to *Brains On!* From APM Studios. I'm Molly Bloom. And today is a very special day, we're talking space. Why? Because space is awesome. You've been sending us your one of a kind, super terrific space jingles, and we're so excited to share them today. Let's hear a couple.

**SUBJECT 4:** (SINGING) I like the sun because it's bright. And I like the stars 'cause it's light. We're off to space and out of sight!

**SUBJECT 5:** (SINGING) Planets and stars and nebulas too. There's so much in space for you to do.

**SUBJECT 6:** (SINGING) Space is really fun. The moon, the Earth, and the sun. It's the one, it's the only. Space!

**MOLLY:** Vivian, Nathan, and Jonathan, thank you so much for sending in those delightful songs. We're going to hear more listener jingles later in the show. But first, we're diving deep into space in the most fun way that we can think of by playing games. And games need contestants. So we'll be beaming in listeners from across the world to join us. First up is Nora from Owatonna, Minnesota.

Hi, Nora. Welcome.

**NORA:** Hi.

**MOLLY:** Today, you'll be playing a game we call--

**SUBJECT 3:** Cosmic couplets.

**MOLLY:** A couplet is two lines that rhyme. Here's how it works. I'm going to read you most of a short poem. Your challenge is to fill in the rhyme with a space-themed word. Like this. Here's an example. A flying space rock skimming through the void, stay out of my way I'm an asteroid. So we'll have that blank, and you'll be filling in the blank.

**NORA:** OK?

**MOLLY:** You sound a little cautious about it. How is your feeling about rhymes? Do you like rhyming?

**NORA:** Kind of.

**MOLLY:** OK, here we go. Made of dust, ice, and other space vomit. I orbit the sun like a planet but instead I'm a--

**NORA:** Comet.

**MOLLY:** Yes. Nicely done, Nora. Comets are a mix of rock, ice dust, and gases left over from the formation of our solar system. They're, kind of, like big space snowballs. And some, like the famous Halley's comet, can be seen from Earth when they pass by. All right, ready for the next couplet?

**NORA:** Yep.

**MOLLY:** For 10 years, I've traveled through, around, and over. Exploring the red planet, I'm the curiosity--

**NORA:** Grover.

**MOLLY:** Oh, so close.

**NORA:** No, rover.

**MOLLY:** Yes! You got it! So NASA's Curiosity Rover was launched into space in 2011. Since then, it's been exploring Mars, learning about the environment, and looking for signs of life. Rovers travel very slowly. In 10 years, Curiosity has traveled only about 18 miles. That is very slow.

**NORA:** Yeah.

**MOLLY:** If you could go to Mars, would you want to?

**NORA:** I like her.

**MOLLY:** OK. Me too. I'll look at Mars from a distance. That sounds good to me.

**NORA:** Yeah.

**MOLLY:** All right, ready for the next couplet?

**NORA:** Uh-huh.

**MOLLY:** Here it is. Our twinkling patterns inspire wonder and adoration. A bear, a little dipper, a hunter, we're--

**NORA:** Constellations.

**MOLLY:** Nice. Very nice. Constellations are groups of stars that people have seen patterns in. For thousands of years people, all over the world have used them to help them navigate the night sky. Do you have a favorite constellation?

**NORA:** I like to see the Big Dipper and the Little Dipper. They're just easy ones to spot for me.

**MOLLY:** Yeah. Yeah. I like seeing them because they have so much good stories and history behind them.

**NORA:** Yeah.

**MOLLY:** All right. Here's another couplet. An icy, gassy rock with 14 moons named for a Roman sea God. It's planet--

**NORA:** Can't think of this one.

**MOLLY:** So it's a planet in our solar system and it rhymes with moon.

**NORA:** I should know this one.

**MOLLY:** It's the planet that starts with an n.

**NORA:** Neptune!

**MOLLY:** Yes. Very nicely done. Yes, Neptune is the farthest planet from the sun in our solar system. Its biggest moon is named Triton for the Greek God of the ocean. And its smallest moon was just discovered in 2013. Scientists named the moon Hippocamp for a creature in Greek mythology with the upper body of a horse and the lower body of a fish.

Two more couplets. You can only see this at night, not in the day. Our cloudy galaxy, the--

**NORA:** Milky Way.

**MOLLY:** Yes. Nicely done. Our whole solar system is just one tiny part of the Milky Way galaxy. The galaxy itself is shaped like a frisbee, round and flat. All right, Nora. Your last couplet. The smallest planet of the ones you'll see and closest to the sun, it's--

**NORA:** I can't get these planets.

**MOLLY:** It's OK. Think about the first planet. The way I was taught the planets is, my very excellent mother. So what's my? Starts with an m. Closest to the sun. And it rhymes with see.

**NORA:** Mercury.

**MOLLY:** Nice. Even though mercury is the closest planet to the sun, it's not always hot. Its atmosphere is super thin. So it can't trap heat. Daytime temperatures on Mercury can reach 800 degrees Fahrenheit, which is almost six times hotter than the hottest temperature ever recorded on Earth. But then at night, it gets super cold, way down to negative 290 degrees.

That is the largest temperature swing of any planet in the solar system. Excellent job, Nora. We're going to beam you back to what you were doing before you started playing, which was-- what were you up to before we beamed you in here?

**NORA:** I was reading.

**MOLLY:** Excellent. Do you have a cozy spot you like to read?

**NORA:** On the couch.

**MOLLY:** All right. So we will beam you right back onto you're spot on the couch. I hope it's still warm. All right. Thank you for playing. Bye, Nora.

**NORA:** Bye.

**SUBJECT 7:** (SINGING) Space, space, a wonderful place where all imagination comes into place. Space, space, a wonderful place where all imagination comes into place, where all eight planets are lots of fun! Space, space, a wonderful place where all your imagination comes into place. Space, space, a wonderful place where all your imagination comes into place. Jazz hands.

**MOLLY:** Wow, Karis, that was space-tastic. All right, let's beam in our next contestant. We've got Aliyah from Tennessee here. Hi. Aliyah.

**ALIYAH:** Hi.

**MOLLY:** We are so excited to have you with us and to play this very special game of--

**SUBJECT 8:** First Thing's First.

**MOLLY:** It's the game where we try to put things in order from oldest to newest. You might have heard my friend Joy Dolo play this game on *Forever Ago*. And I love Joy. So I'm just going to totally copy her with this one. I'm going to give you, Aliyah, three things, and you'll have to tell me which came first in history. Does that make sense?

**ALIYAH:** Yes.

**MOLLY:** Have you heard *Forever Go* before?

**ALIYAH:** Yes. I listen to it a lot.

**MOLLY:** Awesome. Well, we'll tell Joy hi for you. What's your favorite *Forever Ago* episode?

**ALIYAH:** I think it would have to be the one about the macaronis.

**MOLLY:** Oh yes. That one is really funny. Very good choice. Very good choice. And before we talk about this game, I want to know, too, what is your favorite thing about space.

**ALIYAH:** I love that space has like-- it pretty much has no limits. There's different dimensions and there's black holes. All these fun stuff that you can learn about. And we haven't learned half of the things in space.

**MOLLY:** If you could travel to outer space, would you want to?

**ALIYAH:** Yes, because I really want to be an astronaut because I want to float in the air. No gravity.

**MOLLY:** Yeah, that looks so very fun. So is being an astronaut what you want to do when you grow up?

**ALIYAH:** Yes, but I have also a lot of other things that I want to do. So that's one of them, yes.

**MOLLY:** What are some of the other things?

**ALIYAH:** Well, I'm really good at gymnastics. And I kind of want to be a chef.

**MOLLY:** Oof. Those are all hard to choose from.

**ALIYAH:** I know.

**MOLLY:** It's good to have a lot of choices. All right. You ready for First Things First?

**ALIYAH:** Yes.

**MOLLY:** All right. Today we're going to put in order when humans were able to see these outer space sites. All right. They are Saturn's rings, black holes, and Halley's Comet. So what do you think? Which of these outer space things was spotted first by humans?

**ALIYAH:** I think probably Saturn's rings were first. I don't know why. It just seems like it would be like a first type of thing.

**MOLLY:** And then what do you think next, black holes or Halley's Comet?

**ALIYAH:** Halley's Comet.

**MOLLY:** OK.

**ALIYAH:** And then I think black holes.

**MOLLY:** OK. So we're going Saturn's ring.

**ALIYAH:** Yes.

**MOLLY:** Halley's Comet and then black holes. Any reason you're putting them in that order? Is that-- just kind of feel right?

**ALIYAH:** I feel like Saturn's been around for a long time, and I feel like people could probably, like, see its rings because sometimes you can see Saturn in the sky. I don't know. It just feels-- it just feels right.

**MOLLY:** Cool. All right, you ready to hear the answer?

**ALIYAH:** Yes.

**MOLLY:** All right, the answer is, the first thing is actually Halley's Comet.

**ALIYAH:** What?

**MOLLY:** I know. I know. The reason that is the first thing is because a comet is basically a giant space snowball made of dust, rock, and ice, and it orbits the sun. And Halley's comet is visible from Earth every 76 years, and you don't need a telescope to see it. So that's the key thing, is that you since you don't need a telescope to see it, humans have been able to see this for thousands of years. And Chinese astronomers first noticed it in the sky and recorded it about 2,000 years ago.

**ALIYAH:** That's a long time ago.

**MOLLY:** I know. Isn't that amazing? All right.

**ALIYAH:** Yeah.

**MOLLY:** Next up is, so you're right about this order, is Saturn's rings. Nice work. So telescopes are needed to see Saturn's rings, and they were invented about 400 years ago. So when that telescope got invented, it opened up a whole new world of space discovery.

So a few decades after telescopes were invented, astronomer Christiaan Huygens used one to see that Saturn had rings, because before that, we weren't really sure.

**ALIYAH:** Oh my gosh.

**MOLLY:** And then--

**ALIYAH:** --wow.

**MOLLY:** Yeah. Very cool. And then finally, black holes. So scientists started coming up with theories about black holes in the early 1900s. So it's, like, relatively a new idea. And it wasn't until the early 1970s that scientists were actually able to measure x-rays coming from black holes. And it wasn't until 2019 that we actually got a photo of one.

**ALIYAH:** 2019, that was like--

**MOLLY:** Yeah.

**ALIYAH:** --three years ago.

**MOLLY:** That's still in your lifetime. Pretty amazing.

**ALIYAH:** Yeah.

**MOLLY:** Yeah. So I mean, that just shows, like you said, space is so big. There's so much left to discover. So much to learn. And that's why it's so awesome.

**ALIYAH:** Yes.

**MOLLY:** Nice work, Aliyah.

**ALIYAH:** Thank you.

**MOLLY:** Thank you so much for getting beamed in here and playing this game today. We're going to beam you back now, OK?

**ALIYAH:** OK.

**MOLLY:** Bye. Thanks, Aliyah.

**ALIYAH:** Bye.

**SUBJECT 9:** (SINGING) Space, space, go up high. Space, space, a butterfly. Wait. There's no butterflies in space!

**SUBJECT 10:** (SINGING) Space is a very big place, and all the planets, they take up space. So space is a very big place. Yes, space is very big place.

**SUBJECT 11:** (SINGING) Space is the place you want to be. It's full of stars and galaxies.

**MOLLY:** Lucy, Kate, and Anelise, Bronte and Caitlin, fabulous, fabulous work. Our next game is called infinite trivia.

**SUBJECT 12:** Infinite trivia.

**MOLLY:** Let's meet our contestant. We've got Avika here from Dallas, Texas. Hi, Avika.

**AVIKA:** Hey.

**MOLLY:** We're so glad you're here today. And I've got some space trivia. Are you ready?

**AVIKA:** Yes. I hope I'm ready.

**MOLLY:** Well, I guess we'll soon see. All right, first question. Which of these foods is not eaten in space? And now, I should clarify, we don't mean by like aliens or other lifeforms, we mean by humans who happen to be traveling in space. So which one of these foods is not eaten by humans who go to space?

The choices are A, mustard, B, tuna, C, bread, or D, chocolate.

**AVIKA:** OK, I'm going to say C. Because I read somewhere that bread has a ton of crumbs and it could get into technology or the astronauts' eyes.

**MOLLY:** You are 100% correct.

**AVIKA:** Yes.

**MOLLY:** Nice work. That is the answer and why they do it. Yeah, it makes a ton of crumbs. And here on Earth, we can just wipe them up. But in space, they float everywhere. They get in their eyes, into the electric panels, like you were saying. So to avoid these problems, astronauts usually have tortillas, which are less crumbly.

**AVIKA:** That's really cool.

**MOLLY:** Yeah. All right, here's your next question. About how long would it take to drive a car into outer space? So imagine you were on the surface of the Earth and there was a road to space-- doesn't exist, would be cool if it did. So how long would it take? Would it take A, 30 minutes, B, one hour, C, 24 hours, or D, seven hours.

**AVIKA:** OK, I expected like 132 days to be on there. But I want to say--

**MOLLY:** And we should say, this is if you're driving like highway speed. It's like going about 60 miles an hour.

**AVIKA:** OK. So I guess I'll say C because all the other three options, it's how long to take me to get out of my state. So it doesn't really make sense.

**MOLLY:** Well, the answer is actually B, one--

**AVIKA:** What?

**MOLLY:** --hour. Yeah. So the line where Earth's atmosphere ends and space officially begins is called the Karman line, and it's only about 62 miles above the Earth's surface.

**AVIKA:** No way. That's insane.

**MOLLY:** Yeah, so outer space is not that far away.

**AVIKA:** Wow.

**MOLLY:** All right, ready for the next question?

**AVIKA:** Yes.

**MOLLY:** Which is the speediest planet in our solar system? Meaning, how long does it take for the planet to travel around the sun. So which is the speediest, is it A, Mercury, B, Neptune, C, Earth, or D, Mars?

**AVIKA:** A. It's Mercury.

**MOLLY:** Ding. Ding. Ding. Correct. Nice work. You knew that right away.

**AVIKA:** Thank you.

**MOLLY:** So how were you so certain about that?

**AVIKA:** So I read-- I think I read it somewhere or I was bored and I found a simulation where it shows you how fast each planet goes, and Mercury was zooming. So.

**MOLLY:** Nice. Good memory. Yeah. So Mercury, it only takes 88 Earth days for Mercury to get all the way around the sun. So that means if you lived on Mercury, you'd have a birthday every three months.

**AVIKA:** Oh my gosh. That would be awesome! So much cake.

**MOLLY:** So many birthdays. All right. Here's the next question. How many satellites have been launched into space, A, 600, B, 1 million, C, 11,000, or D, 50?

**AVIKA:** A I think?

**MOLLY:** Excellent guess. The answer is actually C, 11,000.

**AVIKA:** Oh.

**MOLLY:** So we first started launching these satellites into space in the late 1950s. So it's been about 70 years. And so that's a lot of time to launch satellites. But there's only been 600 astronauts who have made the trip.

**AVIKA:** Oh, I didn't know. I thought that was less.

**MOLLY:** Yeah. So there's a ton of satellites out there. We use them all the time. Like for your GPS, there's a satellite. For communications and all sorts of things. So we have one final question. Which of the following items cannot be found floating around in space as far as we know, A, a spare glove, B, a spatula, C, a pair of pliers, or D, a bicycle.

**AVIKA:** A-- D, a bicycle? Because why would someone take a bicycle to space? I feel like that would take up a lot of room because aren't they really tiny?

**MOLLY:** Yes. Excellent point and excellent reasoning because you are correct.

**AVIKA:** Yes!

**MOLLY:** Nice work. Yes. So scientists estimate that there could be millions of pieces of space junk floating around our solar system. Some are big like those satellites we talked about earlier. When they're not useful anymore, they just stay out there forever. And others are tiny like microchips of paint or a spatula. The glove, spatula, and pliers were lost by astronauts on missions in space.

Well, excellent work, Avika. You definitely know your space facts.

**AVIKA:** Thank you so much.

**MOLLY:** And I got to ask, what is your favorite space thing that you like to think about?

**AVIKA:** Probably the possibility that there may be like huge alien cities like NYC but in space that may exist out there, and how they would live, and how everything would work.

**MOLLY:** Yeah, that is really so much fun to think about. Well, thank you so much, Avika. Thank you for beaming in here today. We really appreciate it. Bye, Avika.

**AVIKA:** Thank you so much for having me. This was the best.

**MOLLY:** Do you have questions about space or anything else in the world? You can send them to us by heading to [brainson.org/contact](http://brainson.org/contact). That's where we got this one.

**SUBJECT 13:** My question is, how much sleep do we need?

**MOLLY:** You can find an answer to that on our Moment of Um podcast. It's a short dose of facts every weekday. You can find it wherever you listen to Brains On! Just search for Moment of Um. And keep listening!

And we're back. Next up is the--

**SUBJECT 14:** Mystery sound.

**MOLLY:** And we've got not one, not two, but three mystery sounds today. And Sri from Memphis, Tennessee is getting beamed in to test his listening prowess. Hi, Sri.

**SRI:** Hi, Molly.

**MOLLY:** We are so glad you're here to test your hearing today, you're listening skills. So this is an extra special, extra spacey mystery sound round. All of these sounds are things that started out as NASA inventions. So are you ready for that first sound, Sri?

**SRI:** Yeah.

**MOLLY:** All right, here it is.

[VACUUM CLEANER SOUND]

**SRI:** It sounds like a vacuum cleaner?

**MOLLY:** Very good guess. Do you want to hear it one more time?

**SRI:** Yeah.

[VACUUM CLEANER SOUND]

**MOLLY:** Any new thoughts?

**SRI:** No, it sounds like a vacuum cleaner. I know that if there's crumbs in space then they will fly off into something and damage it. So maybe they're trying to collect that before it destroys something.

**MOLLY:** Very good guess. The answer is it's a dustbuster, which is very close. It's just a tiny handheld vacuum. NASA had to invent a tiny vacuum so they could collect samples when astronauts landed on the moon. Pretty cool.

**SRI:** Yeah, cool.

**MOLLY:** When I'm vacuuming, it's not as interesting as samples from the moon.

**SRI:** No.

**MOLLY:** But it's usually just crumbs from crackers.

**SRI:** We don't usually vacuum. We have a Roomba.

**MOLLY:** Ah, yes. Another great piece of technology. All right.

**SRI:** Yes.

**MOLLY:** Here is mystery sound number two.

[MYSTERY SOUND TWO]

**MOLLY:** What do you think, Sri?

**SRI:** Sounds like a baby.

**MOLLY:** What made you think it's a baby?

**SRI:** There's, like, these hiccupping sounds. Then it sounds like it's drinking something.

**MOLLY:** Very good. Let's hear it one more time.

[MYSTERY SOUND TWO]

**SRI:** There's breathing, and then there's liquid. And I feel like it's a straw so that the liquid doesn't float away in space.

**MOLLY:** Well the answer is a baby drinking from a bottle.

**SRI:** Oh.

**MOLLY:** You were totally right the first time, 100%. Don't second-guess yourself. So the baby is drinking formula. And modern baby formula includes an ingredient that was originally invented to make sure astronauts got important nutrients on long missions. It's made from algae. That's pretty cool.

**SRI:** Whoa. If it was a baby and I drank formula. I'd be an astronaut or something.

**MOLLY:** Exactly. Yeah. Yeah, babies--

**SRI:** I'd also be drinking algae.

**MOLLY:** Exactly. Babies are little astronauts drinking algae. All right, you ready for the final mystery sound?

**SRI:** Yeah.

**MOLLY:** Here it is.

[CAMERA SHUTTER SOUND]

**MOLLY:** What's your guess?

**SRI:** That sounds like a camera snap.

**MOLLY:** Very good. Let's hear it one more time.

[CAMERA SHUTTER SOUND]

**SRI:** I'm going to have to guess that's a camera taking a picture.

**MOLLY:** Any guesses about what kind of camera?

**SRI:** Maybe a phone.

**MOLLY:** Correct, Sir. You are right.

**SRI:** Yay.

**MOLLY:** Yes.

**SRI:** Yay.

**MOLLY:** Yeah, a camera phone. So your parents would have way fewer photos of you if it weren't for NASA. They needed small cameras for their missions, and now this technology is used to power the cameras on smartphones. Thank you, NASA.

**SRI:** Yeah, but also no because they take way too many pictures of me.

**MOLLY:** Awesome. Well, thank you so much for playing, Sri. You're getting beamed into us today from the hospital.

**SRI:** Yes.

**MOLLY:** How are you feeling?

**SRI:** Good.

**MOLLY:** Are you going to get to go home soon?

**SRI:** Yeah.

**MOLLY:** Excellent. We are very happy to hear that. We hope you feel all better soon, but we're glad we could entertain you with some mystery sounds.

**SRI:** Yay.

**MOLLY:** Awesome. Thanks so much, Sri. So nice to meet you.

**SRI:** Nice to meet you too. Bye.

**SUBJECT 15:** (SINGING) Space, space, outer space. Got to wear a helmet of your face. Space! Space! Space, space, outer space. Got to wear a helmet on your face. Space! Space!

**MOLLY:** Charlotte, a true masterpiece. All right. Now it's time for our final game and our final contestant. It's Nathan from Flanders, New Jersey. Welcome, Nathan.

**NATHAN:** Hi.

**MOLLY:** If you had the opportunity to go to outer space, would you go?

**NATHAN:** Oh, honestly, not really because there's a lot of factors that go into play like that it takes a while to get into the space suits and stuff. And it might not be as fun as you might think so. If I were to get an opportunity to go into space, I'd pass because I don't think I'm ready yet. I don't think I'm going to be ready. But it's-- I can surely imagine what it would be like going into space.

**MOLLY:** Uh-huh. Yeah, maybe it's more fun as a thought experiment than actually going is what you're saying.

**NATHAN:** Yeah.

**MOLLY:** Yeah, I think that's a very fair assessment. All right. Nathan, are you ready to play our game?

**NATHAN:** Yes!

**MOLLY:** Awesome. It's called stars in space or pasta shape.

**SUBJECT 3:** Stars in space or pasta shape.

**MOLLY:** So I'm going to give you a name, and you'll have to tell me if it's the name of a constellation, that's what we call a group of, stars or if it's a pasta shape. So an example of that would be like if I said Little Dipper, that would be a constellation. Exactly. Although Little Dipper does sound like maybe it could be a delicious kind of pasta with cheese. OK. I'm hungry. Anyway, let's start. Are you ready?

**NATHAN:** Yes!

**MOLLY:** Wonderful. First up is Andromeda. Is that a constellation or pasta shape?

**NATHAN:** Constellation.

**MOLLY:** Correct! Andromeda is a constellation made up of a whopping 16 different stars. It even contains the Andromeda galaxy. Like many constellations, Andromeda got its name from Greek mythology, in this case, a princess.

**NATHAN:** All right. Next question?

**MOLLY:** You're ready. All right. Next up is orecchiette, constellation or pasta shape?

**NATHAN:** Sounds like a pasta shape to me.

**MOLLY:** Correct again, Nathan. Yes, it is a type of noodle. Orecchiette translates to small ear, and that's exactly what these little noodles look like, tiny little ears. And they've never tasted so good. Next name is Cassiopeia.

**NATHAN:** I think that's a constellation.

**MOLLY:** Constellation, yes. Cassiopeia was named after a queen in Greek mythology. Cassiopeia was the mother to Andromeda, so full circle there.

**NATHAN:** Next question.

**MOLLY:** Orion.

**NATHAN:** That's a constellation, for sure.

**MOLLY:** You knew that one right away. Have you seen that one?

**NATHAN:** I've heard of it several times before. Orion is a hunter with the bow that has three stars.

**MOLLY:** Correct. Yes, you know your constellations. So, yeah, again that is from Greek mythology. And it is definitely one of the most well-known constellations around. Nathan, last one. Are you ready?

**NATHAN:** Yeah!

**MOLLY:** All right. You've done an amazing job so far. Last but not least, we have farfalle. What do you think, stars in space or pasta shape?

**NATHAN:** Pasta shape.

**MOLLY:** Correct again! Oh, that's one of my favorite ones. It means butterflies in Italian. Some people call them bow ties, but to each their own. And that concludes our game stars in space or pasta shape. And Nathan, you got all of them right!

**NATHAN:** Yay!

**MOLLY:** You did amazing. And now I am very, very hungry. So I'm going to go make a bowl of pasta.

**NATHAN:** OK. Air five!

**MOLLY:** Air five! Woo! Bye, Nathan. Thank you so much for stopping by.

**NATHAN:** Bye. Bye, Molly.

**SUBJECT 16:** (SINGING) Who wants to learn about the coolest place? Look no further than outer space. Stars and moons and planets too. I want to be an astronaut, how about you?

**SUBJECT 17:** (SINGING) If you need more space, go to space. You should visit the planets, except Venus because it will burn off your face. Bring extra oxygen just in case.

**MOLLY:**

Thank you Tevan and Sri for those delightful space jingles. And thank you to all of our listeners who sent in their songs.

That's it for this episode of *Brains On!* It was produced by, me, Molly Bloom, Rose Dupont, Anna Goldfield, Ruby Guthrie, Nico Gonzales Wisler, and Mark Sanchez. Rose Dupont sang and wrote our ethereal space songs today. Our editors are Shahla Farzan and Sanden Totten. Beth Perlman is our executive producer. And the executives in charge of APM Studios are Chandra Kavati, Alex Shaffer, and Joanne Griffith.

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[LISTING HONOR ROLL]

We'll be back next week with more answers to your questions. Thanks for listening.