

**AUTOMATED** You're listening to Brains On.

**VOICE:**

Where we're serious about being curious.

Brains On is supported in part by a grant from the National Science Foundation.

**ELEVATOR:** Strange. Nobody has been at Brains On headquarters in months. Who would be calling for an elevator?

**ESCALATOR:** Yoo-hoo. Hello.

**ELEVATOR:** Oh, brother.

**ESCALATOR:** Close. It's your sister.

**ELEVATOR:** Hello, Escalator. How are you doing, I guess?

**ESCALATOR:** Well, you know better than anyone since we're twins.

**ELEVATOR:** Fraternal.

**ESCALATOR:** I'm always on the go and moving up, up, up.

**ELEVATOR:** Don't you move down too?

**ESCALATOR:** Indeed. But I prefer to think of those down steps as future ups.

**ELEVATOR:** Oh, no. Too much optimism sends my parts into disrepair. You have always known how to push my buttons.

**ESCALATOR:** Well, dear. You are the only one who with buttons. Going up.

**ELEVATOR:** What are you doing here anyway? Don't you have a celebrity to hoist up to the second floor or something?

**ESCALATOR:** I suppose. But I've been thinking about you lately, and I thought I should say hi. It's been too long since we've hung out together just as people movers. Plus I thought you might need a lift.

**ELEVATOR:** Well, there has been a drastic lack of passengers lately.

**ESCALATOR:** You know, it would be fun to hang out and do some of the fun things we used to do. Maybe like race to the top floor.

**ELEVATOR:** Oh, right. That was fun. Remember that one time when we both stopped working on purpose and then miraculously pretended like nothing had ever been wrong when the repair people came? Good times.

**ESCALATOR:** Say, sis, what about a dance party?

**ELEVATOR:** I do have a nice sound system. So--

**ESCALATOR:** OK, then. What are you waiting for? Going up.

**MOLLY BLOOM:** This is Brains On from American Public Media. I'm Molly Bloom, and I'm here with two co-hosts today. Rachel and Tim from Edinburgh, Scotland. Welcome, you two.

**RACHEL:** Hello.

**TIM:** Hi.

**MOLLY BLOOM:** Today's show is all about siblings because having a sister or a brother or a twin is a super special relationship. You share a ton of stuff and make a bunch of memories together. There are lots of different types of siblings.

**RACHEL:** And other relationships can feel similar to sibling bonds too.

**TIM:** Like family, friends, or cousins.

**MOLLY BLOOM:** Right. So Rachel and Tim, you two are brother and sister. Who is younger?

**TIM:** I'm younger, and I'm Tim.

**MOLLY BLOOM:** And how many years apart are you two?

**RACHEL:** I'm two years older than Tim.

**MOLLY BLOOM:** What would you say it means in your family, Rachel, to be the oldest?

**RACHEL:** Sometimes, I look after Tim, like when he started a new school. I helped him get on the bus. So I'd wait for him at the end of the day, and we get the bus home together, and I get to bus with him as well.

**MOLLY BLOOM:** And Tim, in your family, what do you think it means to be the youngest?

**TIM:** Well, sometimes, it's a bit annoying by the fact that she's bigger, so she'll get to stay up later. Although sometimes, it's quite good because it means that I'm able to continue on doing things when she has to stop them.

**MOLLY BLOOM:** Very interesting. Well, listeners write in asking about siblings quite a bit. And the question we hear most is some version of this.

**SUSIE:** My name is Susie from Nashville. My question is why do siblings tend to annoy each other?

**MOLLY BLOOM:** So Tim and Rachel, I would like to know. Do you two annoy each other ever?

**TIM:** Yeah. We definitely do.

**MOLLY BLOOM:** Do you agree, Rachel?

**RACHEL:** Yeah. We annoy each other quite a lot.

**MOLLY BLOOM:** So I'll start with you, Tim. Like what are the things that annoy you the most?

**TIM:** Well, if I kind of annoy her, then she'll tell me to maybe stop it quite loudly. Sometimes, I try to annoy him back by either whistling or singing songs that he doesn't like.

**MOLLY BLOOM:** What are some of the songs he doesn't like?

**RACHEL:** Let It Go from *Frozen*.

**MOLLY BLOOM:** So is this annoying stuff fun ever, or is it just annoying?

**TIM:** Well, sometimes, it's fun to do, although I don't find it fun to be annoyed.

**MOLLY BLOOM:** How about you, Rachel? What do you think?

**RACHEL:** I agree with Tim on that.

**MOLLY BLOOM:** That makes perfect sense. So why do you think it happens? Why do you think you annoy each other?

**RACHEL:** Sometimes, if I'm annoyed at other people, then that makes me want to be annoyed at Tim.

**TIM:** If I feel bad or something's not going well, then I might annoy her. So like if I feel angry, I might take my anger out on her by annoying her.

**MOLLY BLOOM:** That's very interesting. So maybe you can't really take your annoyance out at the rest of the world, so you can direct it at your brother or sister, which is kind of a safe space to be annoying. That makes sense. And so when we all had to start staying home more, six months ago about, did that change the amount you were annoying each other because you were around each other more maybe?

**RACHEL:** Yeah. We started annoying each other quite a lot more.

**TIM:** Although we're trying to not annoy each other as much.

**MOLLY BLOOM:** How is that going, the trying to stop being annoying?

**TIM:** It's going well.

**MOLLY BLOOM:** Well, that's great. Tell me how you learn to do that because I'm sure other people would like to know too.

**RACHEL:** We have this system where if we're not annoying for a whole day, then we get a pasta, and we put the pasta in the jar. And then when the jar is full, then we get a treat.

**MOLLY BLOOM:** Oh, very nice. So sounds like your parents are helping with the not annoying system.

**RACHEL:** Yeah.

**MOLLY BLOOM:** Excellent. So we're going to dig into why siblings get on each other's nerves in a bit. But first, there is a lot to love about having a sibling. So let's start with the good parts. So Tim and Rachel, what do you think you've learned from having a sibling?

**RACHEL:** I've learned that sometimes, it's good to compromise, and you can't always have do exactly what you want to do.

**TIM:** I think I've learnt to respect what I was given because over lockdown, I wasn't really seeing many people. So to have another person to see and another person to play with was fun.

**MOLLY BLOOM:** Brains On listeners like lots of different things about their sibling status. Here's what a few of them had to say.

**KID 1:** The best thing about being an only child is that no one knock my towers down.

**KID 2:** I don't have anyone to argue with, except my parents, of course.

- KID 3:** I'm a male child. I'm the only one in the family that's a bigger sister and a little sister.
- KID 4:** And being the second youngest, I get attention, but not a lot of it.
- KID 5:** I'm a twin sister. She and I look very different because we aren't identical. It's fun to have a best friend that looks nothing like you everywhere you go.
- KID 6:** I think having a twin is super fun because it's not like an older brother who bosses you around.
- KID 7:** And I think having a twin is good for playing video games because my brother likes video games, and we like a lot of the same games.
- KID 8:** I like being the youngest so then when I'm home alone, they can babysit me.
- KID 9:** When I was born, my brother gave me my favorite stuffed animal.
- KID 10:** And my favorite thing about having a sister is that I like reading to her and together whenever I get bored. I get to play with her, and I always have someone to play with.
- KID 11:** It's fun having a brother like Wease because he's really fun.
- KID 12:** I have six little sisters and one little brother. And I love being the oldest because there are a lot of things you get to do when you're the oldest that your younger sisters and brothers don't get to do.
- KID 13:** I get to stay at the latest one we have movie nights.
- KID 14:** I like being the eldest for two reasons. One, having more trust and responsibility. Two, having a little playmate to play with.
- KID 15:** I build a tower, and then she crashes. It's called Boom. She loves to play Boom.
- MOLLY BLOOM:** High fives to Vivienne, Beatrix, Emmalyn, Bailey, Rachel, Josiah, Ethan and Leah, Meadow, Carter, Ayrton, Eve, Stella, and Ezra for sharing with us.
- RUBY GUTHRIE:** That was suptacular.
- MOLLY BLOOM:** Hey, it's our pal Ruby Guthrie.
- RUBY GUTHRIE:** Hi, Molly. Hi, Rachel and Tim. I heard you were talking all about sibs. And as a professional older sister, I wanted to pitch in. I think siblings are pretty snazzy. It's like having a built-in friend you've known all your life. Growing up together, you probably share a lot of the same perspectives, memories, and most importantly, inside jokes. But I've also heard so many different stereotypes about being a sibling, like how your birth order may affect the kind of person you are.
- RACHEL:** Some people say firstborns are naturally responsible leaders.
- RUBY GUTHRIE:** Or that middle children are good negotiators.
- MOLLY BLOOM:** Or only children are super independent.
- TIM:** While the youngest are the most charming.

**RUBY GUTHRIE:** Right but here's the truth. That's all bogus. Turns out your personality isn't defined by whether you're an oldest, youngest, middlest, or even if you have any sibling at all. It's a bit more complex than that.

**DR. HOLLY RECCHIA:** We can make some generalizations about older siblings and younger siblings, but there's such rich differences between families.

**RUBY GUTHRIE:** That's Dr. Holly Recchia. She teaches education at Concordia University in Montreal, Canada.

**DR. HOLLY RECCHIA:** I think the best way to capture that is to really see what's going on in terms of how kids are playing together, and fighting, and teaching each other, and all these sorts of things.

**RUBY GUTHRIE:** She studies how kids learn and develop, AND she's done a lot of research on how siblings interact.

**DR. HOLLY RECCHIA:** So one thing that is interesting about sibling relationships in contrast to many other close relationships that we have with people in our lives is that they're combined by both complementary and reciprocal features.

**RUBY GUTHRIE:** Complementary, meaning you help one another out. For example, older siblings are more likely to teach their younger siblings or take on more of a caregiving role. Kind of like when Rachel helped him figure out the bus at his new school. On the other hand, younger siblings are more likely to imitate their older siblings. It's similar for me and my younger brother. You see, I'm six years older than him. So growing up, we weren't very competitive, mainly because we were always at really different stages in our life.

While I was off riding my bike, he was still learning how to walk, which made it really unfair if we ever tried to race each other. So we had more of a complementary relationship. But siblings closer in age may have more of that reciprocal relationship.

**DR. HOLLY RECCHIA:** We can think of relationships as having reciprocal features when people, there's a back and forth, and people share similar roles. And we see a lot of that with siblings where in a way, they're like playmates and friends. That they spend time together, and they play, and they fight.

**RUBY GUTHRIE:** This means they might be a bit more competitive, but that's OK. We can learn so much from our siblings, even when we argue.

**DR. HOLLY RECCHIA:** And I think that there are lots of things that kids can learn from coming into conflict with their brother or sister. Things like whose turn it is on the TV, or whose turn it is to sit-in the front seat of the car, or who gets like the truck that everybody loves. Really, when kids are negotiating these disputes, they're learning about principles of justice. When do you need to share? Like when is it OK to take something just for you because it's a special toy?

**RUBY GUTHRIE:** Playing with your sibling is like the training ground to learn how to communicate. Growing up, you end up testing out what works.

**RACHEL:** Like teaming up to build the ultimate pillow bought.

**RUBY GUTHRIE:** And what doesn't.

**TIM:** Like secretly putting slime in your sister's shoes.

**MOLLY BLOOM:** So our sibling status might not determine our personality. But it can teach us some key life skills. Thanks for sharing, Ruby.

**RUBY GUTHRIE:** Thanks for having me, Molly. Now if you excuse me, I have a jam session with my little bro. Catch you on the flip side.

**MOLLY BLOOM:** Tim and Rachel, are you ready to tune in to the--

**AUTOMATED** Mystery Sound.

**VOICE:**

**MOLLY BLOOM:** You ready?

**RACHEL:** Yeah.

**MOLLY BLOOM:** OK. Here it is.

OK. What are your guesses? Who would like to start?

**TIM:** I think that was the sound of somebody like running a tap or like water flowing. Because I could hear a kind of trickle and pat sound.

**MOLLY BLOOM:** Excellent. What do you think, Rachel?

**RACHEL:** I think it sounded a bit like water, but also a bit like someone opening a packet of crisps and then taking out the crisps really quickly.

**MOLLY BLOOM:** So you have some water sounds. Something crispy, crinkly sounding. We're going to hear it again a little bit later and give you another chance to guess in just a bit.

**TIM:** Guess what? Brains On wrote a book.

**MOLLY BLOOM:** It's called Brains On Presents It's Alive: From Neurons and Narwhals to the Fungus Among Us.

**RACHEL:** It's got all the same science and fun of a Brains On episode.

**TIM:** Plus incredible illustrations, mystery photos for you to guess, and science comics.

**MOLLY BLOOM:** We are super proud of it, and we love hearing what listeners think too.

**NATALIE:** Hi, Brains On. My name is Natalie from Kingston, Ontario, Canada. And I love the brains on book It's Alive. It's a lot like the podcast itself with a few new twists of mystery photos and moments of um. You also learn a lot about the world, animals, and science. I love it.

**TIM:** You can learn more about the book on [brainson.org](http://brainson.org).

**RACHEL:** That's also the place to send in drawings, mystery sounds, ideas, and questions.

**SUSIE:** Like this one.

**JOE:** Hi. My name is Joe from New York. And my question is why does rain fall in tiny droplets and not big blobs?

**RACHEL:** We'll be back with an answer to that during our Moments of Um at the end of the show.

**MOLLY BLOOM:** And we'll also read the most recent group to be added to the Brain's Honor Roll.

**TIM:** So keep listening.

**MOLLY BLOOM:** You're listening to Brains On from American Public Media. I'm Molly.

**RACHEL:** I'm Rachel, and here's is my brother.

**TIM:** That's right. I'm Tim.

**MOLLY BLOOM:** So siblings learn a lot from each other and help each other. But that doesn't mean siblings get along all the time. We heard about that from our listeners too.

**SCARLETT:** I have a few problems having a brother. He always tells me what to do. And sometimes, he just bothers me.

**ANDERSON:** They're really annoying, but it's still kind of nice to have them as a company.

**ZACHARY:** The plus is that Eliana really, really, really, really wants to play with me. And the minus is that Eliana really likes to hold on to me.

**MARSHALL:** I love having a younger brother. But sometimes, he can get pretty annoying.

**AMELIA:** Sometimes, she slams her door in my face.

**GIA:** Sometimes, he causes trouble. But sometimes, I don't mind. I just go on with my day. Bye.

**MOLLY BLOOM:** Shout out to Scarlett, Anderson, Zachary, Marshall, and Amelia, and Gia for sending us those thoughts. No matter what your sibling situation, it can be bothersome sometimes.

**RACHEL:** Right. So let's get back to that question of why siblings annoy each other.

**TIM:** I'd honestly love to know.

**MOLLY BLOOM:** Brains On producer Menaka Wilhelm looked into this for us.

**MENAKA WILHELM:** That's one large yupperoni pizza coming right up. I sure did. And there's a couple of reasons why siblings bother each other more than say friends do. Here's a big one. You don't get to choose your siblings the way that you do get to choose your friends.

**NIYANTRI RAVINDRAN:** So this is an opportunity to interact with somebody different from you.

**MENAKA WILHELM:** Niyantri Ravindran told me all about siblings and annoyingness. She studies families at Texas Tech University. And she said that those personality differences, the ones that you don't control, they're a big part of this. Because I mean, if you got to choose your siblings, like in some kind of sibling drive-through, you'd probably order someone who you'd always get along with.

**MAN:** Hi. Welcome to the Sibling Stand. What kind of sibling would you like?

**GIRL:** Oh, Hi. OK, can I have someone who likes a lot of the same stuff as me, but like always wants me to have slightly more toys? And their favorite color is purple, and their favorite animal is an emu, and their favorite pie is strawberry rhubarb.

**MAN:** What?

**GIRL:** Oh, sorry. Or you guys heard of that sibling combo? It's OK if their favorite animal is a sun bear instead of an emu. Do you guys have that one?

**MAN:** No. That's not how this works.

**MENAKA  
WILHELM:** Even though we often grow up in the same place with a lot of the same stuff and the same parents, siblings still turn out to be different people. The Siblings Stand really works more like this.

**MAN:** Hello. Welcome to the Sibling Stand. You'll notice there's no menu. That's because I'm going to tell you what you're getting.

**GIRL:** OK. What am I getting?

**MAN:** Let's see here. The little tuck combo. This one's very popular. That's a sibling a few years younger than you. The combo comes with a small order of things you have in common, a large order of quality time together, and an extra large order of sharing. Plus you're in luck. A chocolate milkshake.

**GIRL:** Oh. Could I just have the milkshake on its own?

**MAN:** Sorry. We only do combos here. Next window please.

**MENAKA  
WILHELM:** So let's look at the parts of that sibling combo that can be bothersome. Spending a bunch of time together is very high on the list.

**NIYANTRI  
RAVINDRAN:** Annoyances come on more when it's somebody you spend a lot of time with. You're a lot more likely to engage in behaviors that just annoy other person intentionally or unintentionally.

**MENAKA  
WILHELM:** You might not always be annoying your siblings on purpose. Sometimes, you might just be trying to get their attention.

**NIYANTRI  
RAVINDRAN:** But you might do that in a way that's annoying. And so it could just be a way of trying to make friends or play with your sibling.

**MENAKA  
WILHELM:** And on the getting annoyed end, it's super normal that some things just make us go uh. If you're seeing smelling and hearing lots of stuff your siblings are doing, some of it is bound to bug you. Besides spending a bunch of time together, siblings also often share space and stuff. And that can be hard.

**NIYANTRI  
RAVINDRAN:** That idea of what's mine versus what's yours is a big source of conflict.

**MENAKA  
WILHELM:** Another source of conflict is when siblings annoy each other on purpose. The next window of the Sibling Stand drive-through it will help explain that. But first, I think you all have another round of the mystery sound to get to, right?

**MOLLY BLOOM:** We do. Rachel and Tim, are you ready to revisit that mystery sound?

**RACHEL:** Yeah.



**MOLLY BLOOM:** All right. Here it is again.

All right. So last time, we were hearing watery noises. Crispy, crinkly noises. What are our new thoughts?

**RACHEL:** I think that the sound at the end sounded like someone dropping something quite heavy. So maybe the thing that they were doing, maybe they were like pouring water into something, and then they dropped it.

**MOLLY BLOOM:** Very good ears. What do you think, Tim?

**TIM:** Well, I've been kind of put off my water idea because I really heard the sound at the end there. So I don't really know. But so I'm going to stick with my water.

**MOLLY BLOOM:** Excellent. This is a tricky sound because there's like multiple parts happening. But here is the answer.

**NICOLE:** My name is Nicole, and I'm from Oakland, California. That was the sound of me stirring a glass of ice water.

**MOLLY BLOOM:** So she is stirring a glass of ice water. And then taking a sip and putting the glass back down. So there was definitely water involved. And you did hear something being put down at the end, SO those were both right on. Do you hear that now that ice sound now that she said that?

**RACHEL:** Yeah.

**MOLLY BLOOM:** Very good ears both of you.

**AUTOMATED** Brains On.

**VOICE:**

**MOLLY BLOOM:** OK. Now let's get back to Menaka and her sibling drive-through. I think she was about to get a little annoying.

**MENAKA** Next up, the Sibling Stand drive-through has some knowledge nuggets about why siblings can annoy each other

**WILHELM:** on purpose better than anyone else. Let's check it out.

**MAN:** OK. So let's review your order. You have sibling combo number one. Small things in common, large quality time, extra large order of sharing. Chocolate milkshake.

**GIRL:** I'm not sure why we're reviewing. You kind of picked my order for me.

**MAN:** I sure did. Later on, as part of this combo, you and your sibling will each know each other pretty well. You'll have an idea of what each other is good at and not so good at. What you like and dislike.

**GIRL:** Ooh. Is it like a secret menu?

**MAN:** Still part of our standard menu. Comes with nearly every combo.

**MENAKA** That last part of the combo, the knowing each other really well part, it's what makes siblings so good at picking  
**WILHELM:** the exact best thing to bug each other on purpose. Just by sharing and living together, siblings become experts in each other's strengths, weaknesses, and annoyances.

**NIYANTRI** If it was a stranger, you wouldn't necessarily know how to annoy them that well. So it's a pattern that you've  
**RAVINDRAN:** learned over time spending so much time with your sibling.

**MENAKA** If you think about it though, to annoy someone on purpose, you have to imagine how they'll feel about the thing you're doing. Because if you know it won't bother them, why bother? And that, imagining how someone else will feel, has a super important flipside. Trying to understand how someone else feels is called empathy. And Niyantri says empathy is also a key part of resolving fights when they happen.

If you can imagine why your sibling might find it annoying if you're practicing your impression of a siren right in their ear, you can probably also imagine why they'll feel better if you take your siren practice outdoors. Being a sibling gives you a bunch of practice, seeing things from someone else's point of view, for nice reasons and annoying ones.

**NIYANTRI** These types of fights and annoyances are normal. And if you're able to resolve them, then you and your sibling are both learning. So you're learning a lot of skills through this process of both playing with them and annoying them.

**MENAKA** And that's all part of the sibling combo.  
**WILHELM:**

**RACHEL:** Thanks, Menaka.

**MENAKA** I'm going to go see if the Sibling Stand has any kind of secret return policy. Bye.  
**WILHELM:**

**TIM:** See you.

**MOLLY BLOOM:** Siblings also can be very competitive with each other. Tim and Rachel, would you describe yourselves as competitive?

**RACHEL:** Definitely.

**TIM:** Yeah. We are definitely competitive. So like when we do like a mini race, we'll go full in.

**MOLLY BLOOM:** You are trying as hard as you can.

**TIM:** Yeah.

**MOLLY BLOOM:** Rachel, what other kinds of things are you competitive about?

**RACHEL:** If we're doing something that someone else has done wrong, we can get quite competitive. We're like I'm right, and you're wrong.

**MOLLY BLOOM:** So some debates happening.

**RACHEL:** Yeah.

**MOLLY BLOOM:** Well, we have another chance for you to compete right now. Humans aren't the only ones with siblings. So we're going to test your knowledge of siblings in the animal kingdom with a game we're calling, Sibling Rivalry. Tim and Rachel, are you ready to play sibling rivalry?

**TIM:** Yeah.

**RACHEL:** Yep.

**MOLLY BLOOM:** All right. Question one. What species of animal is almost always born as an identical quadruplets? I have multiple choice for you. Is it, A, cats. B, armadillos. C, kangaroos. Or D, naked mole rats. What species of animal is almost always born as an identical quadruplets?

**RACHEL:** I'm going to go with D, naked mole rats.

**MOLLY BLOOM:** What about you, Tim? What is your guess?

**TIM:** I'm going to go with my sister on D, naked mole rats.

**MOLLY BLOOM:** Well, the answer is B, armadillos. Nine-banded armadillos nearly always have litters of four identical babies. Meaning most of them are identical quadruplets with their siblings. All right. Question number two. Can you guess the animal that will never forget their siblings, even if they haven't seen each other since they were both an egg? We're not going to do multiple choice this time. Just take a guess. Which animal will never forget their siblings, even if they haven't seen each other since they were both an egg? I'll give you just a tad longer before we run your guesses up the flagpole to see if you're right. What are your thoughts?

**RACHEL:** I'm going to go with a turtle because they always remember where they were born. So maybe they also remember their siblings.

**MOLLY BLOOM:** Very good guess.

**TIM:** I'm going to go with a penguin because I think that they can remember who they've mated with by their call.

**MOLLY BLOOM:** I love that so much about animal memories. That's really awesome. Well, the answer is it's the cascade frog. So these frogs never forget their brothers and sisters. Scientists think that since these siblings have a similar smell, they can easily identify each other. So Tim and Rachel, would you say your sibling has an identifiable smell?

**TIM:** No.

**RACHEL:** I don't know because I don't ever really sniff him.

**MOLLY BLOOM:** Well, maybe next time, you just give them a little sniff and see if it's a familiar smell to you. Now on to some intense sibling competition in question number three. Which animal eats their siblings while they're still in the womb? Is it A, red squirrels. B, striped hyenas. C, sand tiger sharks. Or D, pandas. So which animal eats their siblings while they're still in the womb?

**RACHEL:** I'm going to go with C, sand tiger sharks.

**MOLLY BLOOM:** What do you think, Tim?

**TIM:** I'm going to go with B, which I think was hyenas.

**MOLLY BLOOM:** OK. Yes, it was. The answer is C, sand tiger sharks. Rachel got that point. Sand tiger sharks have two uteruses or wombs where their babies grow. At about five months, the biggest hatchling will start eating the other smaller ones in the womb. So the mother sand tiger shark eventually gives birth to just two baby sharks. One from each womb. All right. Question number four. Older termite siblings do what to the younger ones? A, babysit them. B, annoy the heck out of them. Or C, eat them. Older termite siblings do what to the younger ones?

**RACHEL:** I'm going to go with C, eat them.

**MOLLY BLOOM:** Excellent. What about you, Tim?

**TIM:** Yeah. I'm going to go with B, which is annoyed. Because I already think that we've had enough about siblings eating each other.

**MOLLY BLOOM:** Excellent. Well, the answer is neither of those. It's A, babysit them. So older termite siblings will make sure the baby termites are getting fed and groomed while mom and dad are occupied elsewhere. And finally, question number five. Which sisters stay together their whole lives? Is it A, spiders. B, axolotls. C, chipmunks. Or D, lions. Which sisters stay together their whole lives?

**RACHEL:** I'm going to go with B, axolotls, because they sound cool.

**MOLLY BLOOM:** They do. Axolotls are cool. So that is definitely true.

**TIM:** What about you, Tim? Well, I think that Rachel just stole my line there. I choose the same one.

**MOLLY BLOOM:** You guys have so much in common. The answer is D, lions. So lions who our sisters stay together their whole lives in groups called prides. Males come and go, but the females stay together forever. So I think the final score was Rachel had one point, and Tim had zero points. But I trust you'll be coming up with more trivia questions to quiz each other, so I don't think this game is over yet.

Your birth order doesn't determine how you act because all families are different.

**RACHEL:** But your siblings can teach you how to communicate and about fairness.

**TIM:** Siblings are expert annoyers because you spend so much time with them, and they know exactly what will bother you.

**MOLLY BLOOM:** But if you can imagine what's going to be annoying to your sibling, you can probably also imagine what they'd like better.

**RACHEL:** Animals have siblings too. Sometimes, they take great care of each.

**TIM:** And other times, they eat each other.

**MOLLY BLOOM:** That's it for this episode of Brains On.

**RACHEL:** It was produced by Menaka Wilhelm, Molly Bloom, Sanden Totten, and Marc Sanchez.

**MOLLY BLOOM:** We had production help from Ruby Guthrie, Ava Kean, Nancy Shu, and Christina Lopez. We had engineering help from Eric Romani. Special thanks to Vicki Crockler and Coco Sanchez.

**RACHEL:** Brains On is a nonprofit public radio program.

**MOLLY BLOOM:** You can support the show and help us keep making new episodes at [brainson.org/fans](http://brainson.org/fans).

**TIM:** Now before we go--

**RACHEL:** It's time for a Moment of Um.

**JOE:** Why does rain fall in tiny droplets and not big blobs?

**MONIQUE ROBINSON:** Hello. My name is Monique Robinson. I am currently a master's student at Mississippi State University, working towards attaining my master's in applied meteorology. I previously worked as an on air meteorologist in Wilmington, North Carolina.

The biggest sort of misconception that a lot of people have is that this cloud is one big kind of river of water that's lifted up in the sky. But actually, clouds are made up of several small, tiny water droplets. There's certain ways that the cloud droplets grow. They always sort of start off with this either dust or pollen, something in the atmosphere that can sort of cling to. Think of it sort of like a magnet. If you have a magnet and you have paper clips around it, they're going to all cling and attract to that magnet.

Similarly, if you have pollen in the air, water droplets that are just floating in the atmosphere, they start to condense and collide and sort gravitate to that pollen or that dust, whatever may be in the atmosphere. And so as they continue to cling to it, then those water droplets cling more onto those water droplets. So it becomes this big growing process.

Now all of a sudden, we have a whole bunch of them, and they're growing, and growing, and growing. So what happens is once those water droplets collide and become large enough, they fall. Simply like if you were I guess carrying a bag of groceries, plastic bag of groceries. You had all these food items carrying in that plastic bag of groceries.

Eventually, it would break because you'd have so much in there, and it wouldn't be able to hold that mass. And eventually, they would fall out. Similarly to a cloud, once you have all these water droplets, and they sort of condense, and they collide, and they grow and grow and grow, eventually that cloud can no longer hold it, sort of burst, quote unquote, and they start to fall out.

**MOLLY BLOOM:** It looks like it's about to start raining names because it's time for the Brain's Honor Roll. These are the amazing listeners who share their questions, ideas, mystery sounds, drawings, and high fives with us. [LISTING HONOR ROLL]

**RACHEL:** Brains On will be back soon with more answers to your questions.

**TIM:** Thanks for listening.