

[music]

Speakers: Lingokids.

Speaker: [slurps on a straw]

Speaker: Wow, Elliot, you were thirsty. You finished the whole water bottle.

Speaker: Yep, it's empty.

Speaker: What do you mean, it's not empty, Billy?

Speaker: There's nothing in there, Billy. Look.

Speaker: Air? But how do you know there's air inside?

Speaker: There's no way to know.

Speaker 1: Well, maybe there is, with science.

Speaker: Oh, science is fun.

Speaker 1: It sure is. Welcome to *Storytime* by Lingokids, where we discover fascinating facts about the world around us and the fun of play learning. Lingokids listeners, we will be doing a science experiment that you can do at home too. There's even a science experiment template that you can download and print from the description of this episode.

Speaker: Cool.

Speaker 1: Just remember, when doing a science experiment, the most important thing is to be safe. That means being extra careful with what you're doing, and always having a grown-up helping you, especially with difficult steps or when using unsafe materials. Can you do that?

Speakers: Yes.

Now, is everyone ready for the experiment? Okay. Billy says there is air inside the empty water bottle, but the problem is we can't see air.

Speaker: How can we know if there's air inside the bottle?

Speaker 1: That's what the science experiment is for. It will help us prove that there's air in there. Lingokids listeners, should we try it?

Speakers: Yes.

Speaker 1: Great. It's very simple. All we need is an empty plastic bottle and a small piece of paper about the size of a sticky Post-It Note.

File name: P143_SK71_The Empty Bottle_v1.mp3

Speaker: Okay, I already have a bottle. Will this one work?

Speaker 1: Yes, yours is a half-liter or 16.9 fluid-ounce bottle, which is perfect. This experiment can work with different-sized bottles, but that's what we'll use.

Speaker: Great. We can use one of my colorful sticky notes for the paper.

Speaker 1: Perfect. You're right, Billy. If we want to do a real science experiment and not just play a game, we should write down all our notes and observations. Let's get our science experiment template ready.

Speakers: Okay.

Speaker 1: I think we're ready.

Speaker: What do we do first?

Speaker 1: The first thing we'll do is roll the small note paper into a ball. Try to roll it up nice and round. Okay, next, hold the bottle sideways or lay it on a table to help keep it in place. It helps if the bottle is placed near your eye level because we're going to blow into it soon, but not yet.

Speakers: Okay.

Speaker 1: Now, we're going to put the paper ball on the inside of the bottle opening so that it's balanced right near the edge, but don't let it fall inside the body of the bottle. Ready for the fun part? Using your mouth, you're going to blow air at the ball. Oh, wait.

Speakers: What?

Speaker 1: Before you do, let's write down what we think is going to happen when we blow on the ball. That's right, Billy, we're making a hypothesis or a guess about what will happen.

Speaker: But what if we get it wrong?

Speaker 1: That's okay, Cowy. It's just a guess.

Speaker: Okay. Good.

Speaker 1: Lingokids listeners, you can ask a grown-up to help you write down your guess in the, "What I think will happen," section of the science experiment template. Here's some music while you write and you can pause if you need more time.

[music]

Speaker 1: I think we're ready. What did you guess?

Speaker: The ball is so light so I think I'll blow into the bottle.

Speaker: Yeah, it will go in easily.

Speaker: Hmm, it seems almost too easy.

Speaker 1: Well, let's find out. Face the ball and on the count of three, you're going to blow on it. Ready? One, two, three.

Speaker: Wow. It fell out of the bottle. How?

Speaker 1: We can try it again. Just place the ball in the same place and try blowing again. See if you can get it in the bottle.

Speaker: I can't. I'm blowing as hard as I can.

Speaker: How is the ball going the other way?

Speaker: Is it magic?

Speaker 1: No, it's science. We guessed that the ball would go inside the bottle because there's nothing in the bottle to keep the ball from going in, or at least it looks that way. What do you think stopped the ball from going in?

[music]

Speaker: Air.

Speaker 1: That's right. As we blow into the bottle, the air inside the bottle has nowhere else to go, so it pushes back like an invisible wall. This force or push is what makes the ball fall out of the bottle.

Speaker: Wow, that's so cool.

Speaker: Hurray. That was amazing.

Speaker 1: Wait. We're not done just yet. We still have to write our notes about what we saw. You can write yours under the section on your sheet which says, "What actually happened."

Speaker: Okay. That was so much fun. I guess you were right, Billy. That bottle was not empty after all.

Speaker 1: Lingokids listeners, we had a ball today doing a science experiment together. Do you remember what the most important thing is when doing a science experiment?

Speaker: Safety first.

Speaker 1: That's right. Lingokids listeners, we'd love to see your results. If you'd like to share with us, ask a grown-up to help you take a video and tag us on social media, or send the video to us so we can share it on our Instagram.

Speaker: I can't wait to see.

Speaker 1: If you are ready for interactive play learning time, explore our Lingokids app. It offers fun and educational songs and games to help kids ages two and older learn and develop important skills such as communication, collaboration, critical thinking, and creativity. That's the power of play learning. See you in our next episode.

[00:07:20] [END OF AUDIO]