

CLASSROOM SNIPPETS

Maria and Izzie

[00:32:52.13]

Lydia: When, like, there's, like, um, like a cop coming by, and their siren's on, why does it, like, when you're further away, why does it sound like it's going so much slower then when it comes near you?

[00:33:01.12]

Maria: Okay, so do you guys experience this? Um, if a cop car is far away, it sounds slower then when it's near you?

[Students murmur.]

[00:33:12.07]

Maria: Yeah, I don't know if that's, if that's, I don't know, um, I'd have to, like, pay attention to it today when I go on the street.

[00:33:20.29]

Student: If sharks actually --

[00:33:22.02]

Maria: Hold on, related to what she's -- we're not talking about Jaws anymore. Related to what her question was. So the speed, I mean, I don't, I don't think the speed is, the speed of the sound is changing. It just is, um, the pitch itself. But, um, I don't know, if you guys, I'm not sure, what do you -- does anybody have any comments about that? Like, just about if it's getting -- if it's slower, versus when it's close by? Yeah.

[00:33:50.25]

Annie: Maybe it's because like it takes longer for the sound wave to get to you and maybe there's no like, [inaudible]... like, well, I don't know, like --

[00:33:57.26]

Maria: Okay.

[00:33:59.03]

Annie: If there's -- not as quick as if you weren't next to it?

[00:34:01.26]

Maria: Okay, that's true. That's possible. Okay, that's a good point, Lydia. Yeah, Izzie?

[00:34:07.12]

Izzie: Um, also if you hear, like, an ambulance, like, way down the street, on another street, it kind of, it goes like, it's a, it seems slower, and then --

[00:34:17.22]

Maria: Yeah, that's what --

[00:34:18.08]

Izzie: Yeah.

[00:34:19.05]

Maria: That's what she was saying, yeah. So why do you think that is?

[00:34:22.00]

Izzie: Um, because the sound waves are taking longer for -- to reach you --

[00:34:26.09]

Maria: Okay.

[00:34:27.01]

Izzie: So it sounds slower when it's further away?

[00:34:28.22]

Maria: Yeah, that's kind of what Annie said. Okay, that's a good reasoning. Yeah?

Maria and Lindsay

[00:14:21.06]

Maria: Well, we boiled it to sterilize it, but that doesn't mean that it would get stuck. So somehow, yeah, you're right, so things were blocking it, but how did that first thing get stuck? And I think you guys touched on it, um, with a few of your comments. So, Lindsay?

[00:14:36.07]

Lindsay: My idea is that, um, like, since, like, dust doesn't have a brain, it gets like, um, it's just an object that gets like pushed in with the wind or with air --

[00:14:52.24]

Maria: Right.

[00:14:53.08]

Lindsay: But, like, um, air doesn't go like straight then up, it goes, like, around the thing then stops, so, like, I think it's just that air pushes it in, but since there's no air pushing

back up, it gets stuck there, and then, like, it keeps on doing that until, like, it's all built up.

[00:15:10.28]

Maria: Okay, so you think, um, the organisms, cause it's not just dust, it's also microbes, which are tiny organisms, and they need air. So you're saying like air needs –

[00:15:21.19]

Lindsay: Well, like, they need air to be [inaudible]... and pushed up.

[00:15:24.09]

Maria: Pushed -- okay, well the air, okay, so the air is going in, but the microbes are staying out. Um, let's get a few more comments on this. Yeah?

Karla and Michael (#1)

[00:34:30.17]

Karla: Mm-hmm. So why have more than one of each, though?

[00:34:34.22]

Elaine: So, like...

[00:34:40.20]

Karla: Because what if, what if maggots grew in this one but not this one? It would tell you this one's kind of a fluke, right? Michael, what did you want to say?

[00:34:52.13]

Michael: Um, that, well, like, if he only had one with the net and one without it, um, then he, then he would see, like, then it couldn't, and say the net had, like, a hole in it or something and a fly could get in, um, then the entire experiment could just be, like, wrong if, if you, because if, like, maggots grew in both of them, even the one with the net, um, then you'd be figuring that maggots did just spontaneously generate from the dead meat.

[00:35:22.23]

Karla: Great! So the more –

[00:35:23.22]

Michael: Even if it's not true.

[00:35:24.25]

Karla: The more examples you have, then the more you can be sure that –

[00:35:28.03]

Michael: You're more accurate.

[00:35:28.29]

Karla: The more accurate you are, right. So the more you can be sure of things, like Michael said, like holes in the net aren't affecting your results, the more certain you can be that your results are accurate.

Karla and Michael (#2)

[00:38:51.29]

Karla: Okay, wake up. I can turn the lights back on, would that help?

[00:38:55.25]

Students: Nooooo.

[00:38:57.05]

Karla: Okay, then stay sitting up. Go ahead, Michael. Start, start over so people can hear you.

[00:39:01.21]

Michael: Okay, yeah, well, like, neither of them are, like, showing it, um, but they have to have at least one because this guy has it, um, and --

[00:39:10.26]

Karla: So why, why do they have to have at least one allele in there if they had a kid with an allele?

[00:39:15.06]

Michael: No, I mean they have to have like at least one of the blue, like, if we don't know that it's recessive, they have to have at least one because it could be dominant, um, and since they, and since neither of them actually, like, um, are sh -- showing the blue, and, um, neither of these two are showing the blue, but this, this one is, that, um, that means that it has to skip, or I mean, it has to be recessive because if it were, um, dominant, then this guy, um, then, then this person would have it.