

## Lesson Transcript

T = Teacher (Philippa Haynes, New Prospect Elementary School, Inman, SC), S = Students

### GUIDE

T: So now that we've gathered all this information, and we've looked at how our information is the same and different, now we're going to take a look and see what pieces of our information are talking about the same thing, and how can I come to some sort of conclusion about what I need to do in order to stay safe. So let's take a look at all of our information from resource 1 and resource 2. With our eyes on our information on my chart paper, I want us to think for a second about what information could I piece together that's going to explain to me what a tsunami is. I'm going to give you a second to look at this, because that's a lot of stuff that you're going to have to reread. You can't do it right off the bat. You have to take a minute and you have to look. So I should see all eyes on here (points to chart), and I want you to be thinking, "What 3 pieces of information from either resource 1 or 2 is going to tell me what a tsunami is overall?"

(wait time) T: Ms. R, what piece of information did you see from either resource that taught you, hey, this is what a tsunami is?

S: Resource 1, "tsunami means harbor wave."

T: OK, but does that give me a picture in my mind of what a tsunami is? If I go up to you and say, "harbor wave" and you've never heard about tsunamis, are you going to get a picture in your mind of what a tsunami actually is? Probably not. What are you thinking?

S: Resource 2 #1

T: Why do you say Resource 2 #1?

S: Like if you tell someone it's caused by an earthquake and there's an explosion under the ground and the waves start coming bigger and bigger and it can wreck a lot of stuff it's (inaudible).

T: Interesting. So I'm going to circle this piece of information because I think this is a really good diagram that tells me what a tsunami is, or gives me a good picture in my brain of what a tsunami may look like. Are there any other pieces of information up here that gives you a good picture in your brain of what a tsunami looks like.

T: So I have these 3 pieces of information now. Using these 3 pieces of information, I want you to think. What would you do, knowing these three pieces of information about what a tsunami looks like, what would you do in order to stay safe? What conclusion have you come to when it comes to a tsunami approaching, and I know, hey, I know this occurs when a tsunami's coming, I know it can be 385 feet high, and the speed depends on the depth of the water.

P: I want you to turn to the person next to you and tell that person what would you do if a tsunami was coming, what would you do? (students turn and talk)

T: (conferring) What have you concluded you would do to stay safe?

S: Leave all your stuff behind

T: And what?

S: Run

T: Let's put your eyes back up on me. I heard a lot of different people giving me the conclusion they reached about what to do to stay safe. I want to show you what a tsunami would look like if it were approaching.

T: What has just happened?

S: It's getting a little high

T: It's high and it has done what?

S: It's pushing a boat.

<p>S: It's pushing the cars and what I said, floods, it can push</p> <p>T: It looks all of a sudden like a flood, doesn't it? Look, look what it's doing to those houses!</p> <p>S: It's pushing the house.</p> <p>S: It's destroying everything!</p> <p>S: Where is everybody by the way? In their houses?</p> <p>T: Would you want to be in your house right there that's moving?</p> <p>S: (unison) No!</p>
<p>T: Right now, if you were in that position, what conclusion can you make about what you need to do in order to stay safe .</p>
<p>What would you do?</p> <p>S: Run. Get out.</p> <p>T: Run. Leave.</p>
<p>T: Let's talk for a second, knowing what I know about tsunamis, knowing these 3 facts and what it looks like when a tsunami's coming, what safety conclusion would you say you need to do?</p> <p>S: Get out. Run.</p> <p>T: You need to – leave the area. So I'm going to put – (writes) You need to leave the area.</p> <p>S: (comments)</p> <p>T: That's your first priority, to leave as fast as you can.</p>
<p>T: So based on all of my information, I have concluded it would be really important, knowing what a tsunami looks like, that you need to leave as fast as you can.</p>
<p>T: So that's what you are going to get to do today. I'm going to put you back into your groups. Don't worry about everybody writing down the safety conclusion, just choose one person from your group to do it. But I want you to circle for me between 2 and 3 facts that tell you what your severe weather looks like, and then as a group I want you to come to a conclusion on what you need to do in order to stay safe.</p>
<p><b>COLLABORATIVE PRACTICE</b></p> <p>T: Decide as a group.</p> <p>S: Me</p> <p>S: Me</p> <p>T: You just need one paper. Don't worry.</p> <p>S: Let's use mine.</p> <p>S: Ok, fine.</p> <p>T: Good compromising, B, I like that.</p>
<p>T: (reading from group paper) Lightning is hotter than the sun, is there anything else that tells you what lightning looks like?</p> <p>S: OK</p> <p>T: Anything else that tells you what it looks like? Now we're focusing on lightning.</p> <p>S: Let's see.</p> <p>S: Lightning is a spark of electricity.</p> <p>S: Lightning is faster than sound. That would give you a picture of how fast it goes.</p> <p>T: OK. So what would be your safety conclusion, knowing that lightning is hotter than the sound, can be more than 50 miles long, and is faster than sound. What would you conclude that you need to do?</p> <p>S: You need to get out of there.</p> <p>S: You need to stay in your house.</p> <p>T: Why do you say stay in your house? What caused you to say that so quickly?</p> <p>S: Because it can keep you safe and can't strike you.</p> <p>T: What do you guys know about what it strikes?</p> <p>S: It would have to be a tall thing.</p> <p>T: Where did you see that in your research?</p>

S: Right –  
S: Right –  
T: Perfect. So I would circle that one too, because that's important to know, that lightning hits the tallest object all the time. So in order to stay safe, what would you conclude you need to do?  
S: (together) Stay in your house.  
T: Why in your house?  
S: Because it can't strike through your roof, unless it's not a hard roof.  
T: Interesting. OK, so your safety conclusion is you're going to stay in your house.

S: CAPTION: There's nothing else that tells us about it.  
T: Nothing else that tells you what it looks like?  
S: No  
T: Are you sure? Your friend says yes.  
S: CAPTION: I saw nothing else.  
T: Then let's take another look. Sometimes we might have missed something.  
T: Ah, I see a diagram that you chose. Which one did you like better?  
T: OK, so what do you know about tornadoes and the damage they can cause?  
S: They can cause a bunch of damage.  
S: It said in the book it can kill a bunch of people.  
T: Why is that do you think?  
S: Because a tornado can suck up houses.  
T: I heard you talking about how the tornado spins and can suck stuff up. Is that something you might want to add to your resources? Why?  
S: Because if you know it can pick things up then you don't want to stay in the house or nothing.  
T: So what would be your safety conclusion?  
S: CAPTION: We're going to put, you need to get into a basement.  
T: Why a basement?  
S: CAPTION: It's underground.  
T: And if you're underground, why is that safer?  
S: CAPTION: It can't suck you up.  
S: If it like, could suck up the ground, it would probably suck up itself because it's on the ground.  
T: You guys are so insightful, I'm loving that.

T: Now based on all of this information, what can you conclude about what you need to do to stay safe? (pause) In order to stay safe and not get hit by this hail, or get pushed over by this wind that can go 58 mph, which is almost as fast as you go in a car when you go down I26 –  
S: CAPTION: Leave the area  
T: Would you leave the area, though, if it's hailing outside, and there's winds pushing everywhere?  
S: Nooo  
T: Where are you going to go?  
S: CAPTION: In the house!  
T: A thunderstorm's coming guys.  
S: (in unison) Go in the house.  
T: Why would you stay in the house.  
S: CAPTION: So you won't get struck by lightning  
S: Well, lightning can strike a house  
T: Yes, but what's more likely, do you think you'll be struck outside or inside?  
S: Outside.  
T: Probably more likely that you'd get struck yourself outside than inside. So what is your safety conclusion then? (pause) What would you do, if a thunderstorm was coming  
S: CAPTION: Stay in the house!!  
T: OK, write it down.

T: So in your opinion, what would you do if a flood was coming? Think about what your group was

talking about. C, what were some things you decided, when you were having those conversations with your friends about what you learned about floods, what did you guys talk about?

S: Most floods can be strong, they can push up

T: But where did you say you should probably go

S: You should probably go (pause)

T: Think back to the conversation on the carpet and your friends were asking you about floods, and saying where could you go to not get in the flood's way?

S: You can go on top of the house, because, because most floods are just like, just up to the top of the door.

T: So you're saying if you go to a high point, that you'll probably stay safe? So what should your safety conclusion be then?

S: Go on a house.

T: Go somewhere up

S: High.

T: High. That's exactly right.

S: What if it moves?

S: Like the house in the video.

T: That would be a different story, you're right, things to keep in mind.

T: (to next group) Do you have a conclusion yet?

S: Yes.

T: Let me see.

S: CAPTION: Hop in your car and step on it.

T: Step on it where?

S: To another place.

T: So move away from the area.

S: Step on it to move away from the area.

S: We couldn't find another one of those.

T: I like the way you guys said that, when you said, Step on it, that means I've got to get away fast. I don't want to piddle around with that one. Awesome.

## **SHARE**

T: I want your group to share with everybody else what your severe weather looks like, and then tell us your safety conclusion that you came up with. So let's go ahead and get started. Let's start with the tornado group first. So give us some facts about what a tornado looks like. Remember to put your papers in front of you so you're not tempted to touch them, and remember this is like a conversation we're having at the lunchroom table, your eyes should be on the person talking.

S: Tornado alley is a part of the country where most tornadoes hit.

T: OK, what else does it look like?

S: It looks like –

T: Read your fact.

S: A tornado goes 300 mph.

S: And here's a definition it's sucking it up like a little car.

T: Interesting. So before we hear their safety conclusion, I want to show you a video of what a tornado looks like.

<p>T: Wow. So those 300 mph winds they were talking about, they can do some what?</p> <p>S: Damage.</p> <p>S: Who was brave enough to do that?</p> <p>T: Alright. So let's stop the video right there –</p> <p>S: Is that real?</p> <p>T: It is real. We're going to come back to this group. Tornado experts, what would you do, what conclusion did you come up with, that you would have to do in order to stay safe?</p> <p>S: You'd get in a basement.</p> <p>T: Why did you say a basement?</p> <p>S: Because it's lower to the ground and if a tornado sucks up the ground, it will probably suck up itself because the tornado is on the ground.</p> <p>S: But if you can't get to a basement, you'd probably get to the lowest place, or a closet or like stairs.</p> <p>T: Do you agree with them? Disagree with them?</p> <p>S: And don't throw nothing at it because it'll bounce right back at you and don't get nowhere where there's windows.</p> <p>T: Anybody have a comment? Do you agree that that might be the best thing to do based on –</p> <p>S: (clap)</p> <p>S: One time I was in a tornado and I went to the basement.</p> <p>T: Yes, that would be a good thing to do.</p>
<p>T: Anything else that this group wants to add about what floods look like or what they can do?</p> <p>S: Damage stuff.</p> <p>T: OK, elaborate on that a little.</p> <p>S: It can damage houses and all that.</p> <p>T: Interesting. How</p> <p>S: Because it's strong.</p> <p>T: What's strong?</p> <p>S: The water.</p> <p>T: The water, and the water pushing things. OK, so before we hear their safety conclusion, I want to show you what a flood looks like, and these are all real severe weather that I'm showing you.</p> <p>T: Look. There's the top of a barn, the rushing water, you can see where people have tried to put up sandbags. What do you notice about the level of the water right there?</p> <p>S: OH!</p> <p>T: That's a street sign! So let's stop the video right there, and my flood expert people, what conclusion did you all come up with to stay safe during a flood, what would you do?</p> <p>S: Go somewhere high, but not low, because if you all go somewhere low, like those basements, the water would leak inside</p>
<p>S: and it would also flood it.</p> <p>S: CAPTION: That's the opposite from ours.</p> <p>T: It is, isn't it. Yours was go down low and their's is go up – high. Interesting conclusions.</p>
<p>(sound of thunderstorm from video) T: In your opinion, my thunderstorm experts, what conclusion did you guys come to about how to stay safe? What should you do?</p> <p>S: CAPTION: Stay in the house.</p> <p>T: What do you all think about that?</p> <p>S: Good.</p> <p>T: Why do you say that?</p> <p>S: Because if you stay in your house, the rain wouldn't get on you and stuff, and the hail, if hail dropped on your head, it would really hurt cause it's ice.</p> <p>S: It's big as a gol fball.</p>
<p>T: My hurricane experts, come back over here and tell your friends what conclusion you came to about how to stay safe. What would you do?</p>

S: CAPTION: Hop in your car and step on it and move out to another area because if you don't –  
S: and move to another place.  
T: Do you like how they said, Step on it! Why did they say that?  
S: (lots of responses)  
T: Do they want – do you think if a hurricane is coming, do you think they want you to sit back, oh, just watch this episode of SpongeBob Square Pants – No. They want you to what  
S: Get out of your house  
T: Get going.

T: Turn your head and let's take a look at what a lightning storm looks like. Whew!  
S: Oh, beautiful lightning!  
T: It looks beautiful, but if it's hotter than the sun, that means what?  
S: Dangerous.  
S: It wouldn't be beautiful if it hit you.  
T: It wouldn't be beautiful if it hit you, would it?  
S: (unison –oh!)  
T: Look at that. Cool to watch, but if you are telling me it can be over 50 miles long, and it can be hot as the sun, what safety conclusion did you come up with.  
S: Stay in your house.  
: What did you guys tell us about what lightning strikes first?  
S: The tallest object.  
T: The tallest object. So let me ask you this, I'm going to throw this out there for you, knowing that lightning strikes the tallest object outside, if you were outside, what would you do? And you didn't have a place to go inside, what would you do?  
S: I would go to like an open space, where no trees are.  
T: So if you get down on the ground, or a hole in the ground, are you the tallest thing in the field anymore?  
S: No.  
T: You guys are so clever.

T: Do you see how today you were able to gather that information, and just based on things you had read, you came up with your own conclusions about what to do to stay safe.  
S: Yeah  
T: In order to do that, what did you have to do?  
S: CAPTION: Think  
T: You had to think through it, didn't you?  
S: CAPTION: It was a thick question.  
T: They were, we had some thick questions.