

Transcript for Video Clip 2.3

Teacher/video ID:	Torres, 2.3_stella2-04-torres4-L3_c1-c2
Content area:	Earth's changing surface
STeLLA strategy:	Ask questions to probe student ideas and predictions (STL strategy 2). Ask questions to challenge student thinking (STL strategy 3).
Context:	In this lesson on Earth's changing surface, students are using foam mats to explore the different ways Earth's crustal or tectonic plates can interact.

Video Clip 3a

Time Code	Speaker	Discussion
00:00:00.5	SN	... 'Cause that one's moving faster.
00:00:02.6	T	That one's moving faster? What happens when they collide?
00:00:05.1	SN	They form an earthquake.
00:00:06.9	T	Well, let's take a look. What's happening? What do you see is happening?
00:00:10.7	SN	Like this one's bending the other one.
00:00:12.0	T	That one's bending up. OK.
00:00:14.0	SN	Or, like, if they hit a bigger [inaudible], the magma can come out.
00:00:18.9	T	What are you thinking with that?
00:00:22.3	T	Let's say that hits there. What would be happening? Where would the magma come?
00:00:26.8	SN	Oh, right there.
00:00:28.3	SN	Like, in.
00:00:31.0	T	OK, where is the magma at?
00:00:33.0	SN	Under ... under the crust.
00:00:34.6	T	OK, and then where's it going?
00:00:38.5	T	OK, here this hits—
00:00:41.6	SN	It's bending up, and the magma's going up with it.
00:00:46.1	T	It's going up with it?
00:00:47.0	S	Yeah, maybe.
00:00:48.9	SN	And it's pressuring it more, so it grows more.
00:00:51.3	T	OK. Jalen? OK, Sam, would you like to give Jalen your activity so she can at least experiment if you're not going to participate with her?
00:01:03.5	SN	So you have to go, like, head-on, like, the stress [inaudible] go up—
00:01:15.0	SN	[inaudible] like, they would go like this. The plates would hit, and then they would ...
00:01:17.8	S	and then they would go like this and be like ...

00:01:20.4	SN	And then collide and, like, rub against each other.
00:01:23.0	SN	Yeah.

Video Clip 3b

Time Code	Speaker	Discussion
00:01:25.4	T	OK, what happens, though? What happens if you have plates here, and the arrows go that way?
00:01:33.0	SN	It's just gonna [inaudible]—
00:01:34.0	T	OK, now think of the eggshell. Here's your egg. What happens as that shell pulls apart?
00:01:43.0	SN	Kinda just blows up pretty much?
00:01:45.5	T	Does it blow up?
00:01:45.6	SN	And it makes 'em all move.
00:01:47.4	T	What are you gonna see when we pull them apart?
00:01:50.6	S	Hot, melted rock [inaudible] in the mantle.
00:01:53.7	T	And then what happens to that mantle?
00:01:56.1	SN	It melts?
00:01:56.7	SN	Gets like a liquid, so it would just fall out.
00:02:01.0	T	Fall out? So here's a door. And there's mantle underneath, and the door's open.
00:02:07.8	SN	Oh, like a volcano?
00:02:09.8	T	Like a volcano? How do you mean that?
00:02:11.4	SN	Like they begin as a mountain. Then when it has sometimes years or months or days, it opens and it opens
00:02:20.1	S	until all the lava comes out.
00:02:22.6	T	You think that's how a volcano comes?
00:02:25.1	SN	Sometimes when it gets too hot, the volcano tries to open as fast as it can so all the erupting goes away.
00:02:33.7	S	Until it closes again and again and again.
00:02:36.5	T	So you think it's the plates that are opening and closing because [of] the volcano? OK.
00:02:42.1	SN	I think it's— How about— I think it's a mountain. Just builds up from earthquakes and stuff, and then eventually people treat it badly and stuff,
00:02:55.0	S	and it starts opening or something, and then the lava, I think, gets how the mantle has melted it all,
00:03:02.3	S	and then the lava just comes up the mountain, the volcano and—
00:03:07.6	T	All right. We have some different ideas going around. I'm going to have to write that as one of our questions about volcanoes.