

Transcript for Video Clip 2.2

Teacher/video ID:	Duin, 2.2_stella_WC_duin_web_c2
Content area:	Water cycle
STeLLA strategy:	Ask questions to probe student ideas and predictions (STL strategy 2). Ask questions to challenge student thinking (STL strategy 3).
Context:	During this lesson on the water cycle, the teacher posed the focus question, <i>Can we make water disappear?</i> and elicited students' ideas before having students observe a beaker of boiling water. The class is now discussing what they're observing. They haven't yet studied anything about molecules, evaporation, or the water cycle in this class.

Video Clip 2

Time Code	Speaker	Discussion
0:00:01.0	SN	Ryan.
0:00:01.9	SN	Well, I noticed that there's some steam coming out of the beaker, so maybe, so some of the water's evaporating, and it's coming up with the steam.
0:00:11.6	T	OK. Ryan, call on somebody else.
0:00:14.0	S	Jack.
0:00:15.0	SN	Well, I noticed that when the water gets hotter, the water starts moving a lot.
0:00:25.2	T	OK, when the water gets hotter, the water is moving a lot?
0:00:29.1	S	Yeah, like it's—
0:00:29.6	T	OK, what do you ... what do you ... what are you seeing that is proving that it's moving a lot?
0:00:35.6	S	Well, on the top, it's, like, waving. Like an ocean.
0:00:41.1	T	Oh, the top of the ... like the surface area?
0:00:43.8	S	Yeah, and then the water ... the heat underneath the beaker is pushing more water when it gets hotter.
0:00:52.6	T	OK, it's pushing more water. What do you mean by "pushing"?
0:00:55.1	S	Like, more ... like heating them upwards.
0:00:59.0	T	OK. Does anybody see anything with our mark? Has anything happened with our mark?
0:01:04.9	SN	I can't—
0:01:05.3	T	Tyler.
0:01:06.5	SN	Like, at first the water, it was calm, and it just sat at the mark. But as it got hotter and there was more bubbles, then the water started moving, and it's kind of like, bouncing, up over the mark.
0:01:20.2	T	OK.
0:01:20.4	S	The bubbles ...
0:01:20.6	T	kind of are bouncing up over the mark right now. What if you turned it off; what do you think would happen?
0:01:25.9	SN	After ... it'd still be bub— It'd still be bubbling a lot, but then gradually it would get colder

		and colder.
0:01:33.4	S	And then the bubbles would go down, and then eventually it'd be at the line again or even below, 'cause water evaporated.
0:01:42.8	T	OK. So let me ask you this question again. Will the water disappear?
0:01:50.0	SN	After a while, yes.
0:01:53.5	T	OK, who else has anything else they want to add?
0:01:57.9	T	Michael.
0:02:01.6	SN	My idea is that because the water, it's moving so much, that it ... each, like, little miniwave will push another water molecule out of the water.
0:02:15.4	T	OK. OK.