

Transcript for Video Clip 2.3

Teacher/video ID:	Dieken, 2.3_stella_WC_dieken_c4
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:	Prior to this lesson, students studied how molecules behave in evaporation and condensation. However, they have not previously addressed any ideas about the water cycle. In this lesson, the focus question is, <i>Do you think you could be drinking the same water as the dinosaurs drank? Explain your thinking.</i> Just prior to this clip, students shared their initial ideas about this question in small groups. The clip begins after the teacher noticed the phrase <i>water cycle</i> was mentioned in nearly all the small-group discussions.

Video Clip 3

Time Code	Speaker	Discussion
0:00:00.9	T	And I want you think about it for a second. But most of you, almost every table mentioned the water cycle.
0:00:06.7	T	So what's the water cycle? Someone I haven't heard from in a while; 'd like them to come answer.
0:00:13.4	T	Give me an answer. Justin.
0:00:16.7	SN	Um ...
0:00:17.0	T	Come tell me what the water cycle is.
0:00:18.3	S	The water cycle is ... I think it's precipitation—
0:00:24.7	T	OK.
0:00:25.0	S	—and then evaporation and then condensation.
0:00:29.2	T	All right, can you tell me what's going on in those [processes], please? A lot of you mentioned those words before [inaudible].
0:00:36.3	S	Precipitation is, like, when it starts to rain. And then ... and then condensation is when, like, it's ... the water, like, turns into smoke, and then it evaporates into the air.
0:00:48.7	S	And then evaporation is, like, when it ... when it disappears.
0:00:53.1	T	OK. We've got evaporation that you mentioned.
0:01:00.0	T	Condensation. And what was that last one that you mentioned?
0:01:05.6	S	Evaporation?
0:01:06.4	T	We've got that.
0:01:07.8	S	Oh, precipitation.
0:01:09.4	T	And precipitation.
0:01:14.3	T	Let's look at the water cycle for a second, though. We know what water means. What does water mean? Or what does water refer to?
0:01:22.4	SN	I don't know.

0:01:23.6	T	Kira?
0:01:24.6	SN	A liquid. Water refers to a liquid.
0:01:28.7	T	To a liquid that— Can you tell me anything more about this liquid thing?
0:01:32.5	S	That we drink.
0:01:34.3	T	OK. What about the cycle? What does “cycle” mean? Or what does “cycle” make you think about? [Inaudible].
0:01:40.6	SN	A cycle ... a cycle could be, like, recycling, that a water cycle—
0:01:46.7	T	Uh-huh.
0:01:47.6	S	—or anything, it’s just as long as if—
0:01:51.7	T	So what does a cycle make you think about?
0:01:54.4	S	Sort of like a pattern.
0:01:55.8	T	A pattern in what way?
0:01:57.6	S	That it—
0:01:58.3	T	What does this pattern look like?
0:02:00.3	S	Well, sort of like a circle, so it’s, say, in liquid recycling—
0:02:06.1	T	Uh-huh.
0:02:06.6	S	—if it’s a bottle, and then, well, it can be made into different things, but it can be a bottle; then it goes back and made into a different type of bottle, something completely different.
0:02:18.0	T	Something that you can use again?
0:02:19.1	S	Yeah.
0:02:19.5	T	OK. So with the water cycle, we’re talking about a circle. What do you think is going in a circle in a water cycle?
0:02:29.1	T	The same people are raising their hands. Mark. Tell me.
0:02:33.4	SN	In a water cycle, the water goes in a circle.
0:02:36.2	T	OK. Now specifically, we’ve been talking about water. Can you tell me more local— smaller things that go in a cycle or in a circle?
0:02:46.2	S	Water molecules.
0:02:48.7	T	Water molecules go in a circle. Tyler, what do you want to add to that?
0:02:53.5	SN	I forgot.
0:02:54.2	T	Can you tell me something that the water molecules might be doing as they go into the steps of the water cycle?
0:03:00.6	S	Um ...
0:03:01.6	T	Stand, please.
0:03:05.2	T	Give me one step. Let’s take evaporation. What’s going on with the water molecules in evaporation?
0:03:12.1	S	When the water heats up, it evaporates.
0:03:14.2	T	Which means what?
0:03:19.2	T	What do you mean?

0:03:23.4	S	I don't know how to explain that, but—
0:03:24.7	T	All right, can someone help him out?