

Transcript for Video Clip 8.1

Teacher/video ID:	Anderson, 8.1_stella_SEC_anderson_c2
Content area:	The Sun's effect on climate
STeLLA strategy:	Make explicit links between science ideas and activities (SCSL strategy F). Link science ideas to other science ideas (SCSL strategy G). Highlight key science ideas and focus question throughout (SCSL strategy H).
Context:	In this lesson about the Sun's effect on climate, students are working with a model of Earth's orbit around the Sun to understand why it's summer in North America when it's winter in South America. At first students don't know about the consistent tilt of Earth's axis toward the North Star, but this idea is introduced during the activity.

Video Clip 1

Time Code	Speaker	Discussion
0:00:01.9	T	You have these three pieces that go, well, kind of in separate pieces, but basically
0:00:07.6	T	We've got this one. What do we say this one represents? Micah?
0:00:10.9	SN	The orbit of the Earth.
0:00:11.8	T	Orbit of the Earth.
0:00:14.3	T	And then we had put [components of the Earth-Sun model] together. Some had put it together this way; others had put it together this way.
0:00:21.9	T	And what do these represent? Yeah, Noah.
0:00:24.9	SN	The Earth.
0:00:25.8	T	Represents the Earth. Can we be specific? What part of this represents the Earth, Sebastian?
0:00:30.6	SN	The little Styrofoam ball.
0:00:33.2	T	The ball, OK. What does the ... what do we talk about ... about the dowel that's going through there? What is that representing, Maya?
0:00:40.4	SN	The axis.
0:00:41.3	T	The axis. OK, good. And then we have the rubber band around the middle [that] is representing [what], Kaley?
0:00:47.1	SN	It's representing the equator.
0:00:48.7	T	The equator. And then we have two pushpins, and they are representing [what], [inaudible]?
0:00:55.1	SN	North America and South America.
0:00:58.1	T	North America and South America is good, yeah. Or the United States and Brazil.
0:01:04.6	T	And then, of course, everybody, I do have a couple of extra lightbulbs today, so we shouldn't run into that problem again.
0:01:12.8	T	We do have this little setup right here, and this is going to represent ... similar to our flashlight from an earlier lesson, Kaya?
0:01:18.8	SN	The Sun.
0:01:19.2	T	This is our light source or the energy source, the Sun. OK?

0:01:22.6	T	So putting all that together, I have a specific goal for you today.
0:01:29.5	T	When we get together after you do your model, I want your group to be able to show me and show the class where in Earth's orbit North America or the United States ...
0:01:45.1	T	Where in that orbit would it be summer, and where in that orbit would it then be winter in North America and summer in South America? OK?
0:01:56.9	T	So I want you to focus on summer. Where in your orbit is it summer in North America? Where in your orbit is it summer in South America or Brazil? OK? Also ...