Transcript for Video Clip 5.1

Teacher/video ID:	Jeff Evans, 5.1_stella_SEC_evans_L6_c1
Content area:	The Sun's effect on climate
STeLLA strategy:	Identify one main learning goal (SCSL strategy A).
Context:	In this lesson on the Sun's effect on climate, students are exploring the impact of elevation and proximity to water on the average temperature of cities at the same latitude.

Video Clip 1

Time Code	Speaker	Discussion
0:00:02.4	T	So the connection we're making today is looking at soil and water under a heat lamp. Heat lamp representing …
0:00:12.1	SS	The Sun.
0:00:12.8	T	The Sun, sunlight. Yes, OK. So—
0:00:14.7	SN	Solar energy.
0:00:15.9	T	Nathan, say it.
0:00:16.7	S	Solar energy.
0:00:17.3	T	Nice, solar energy right here.
0:00:20.7	T	And the effect solar energy has on heating soil and water … and then, when we turn off the lamp, that will represent what season?
0:00:31.4	SN	It's winter.
0:00:31.7	SS	Winter.
0:00:32.1	T	Winter. Of course, Sun on … or the light … lamp on representing the Sun, representing which season?
0:00:36.8	SS	Summer.
0:00:37.5	T	Summer, so we have summer and winter heating on soil and water. And we want to see how that may impact these three cities of San Francisco, right here in Colorado Springs, and St. Louis, Missouri.
0:00:52.1	T	OK. Questions so far?
0:00:55.2	T	Now we know there are other factors that influence climate, aren't there?
0:00:59.0	SS	Yes.
0:00:59.3	T	The curvature of the earth. Earth is a sphere. That's one.
0:01:05.6	T	Earth's orbit around the Sun. Yes?
0:01:10.2	T	How far are we from the Sun?
0:01:11.8	SN	Ninety—
0:01:12.2	SN	Ninety-three—
0:01:12.9	T	Say it.
0:01:13.7	SN	Ninety-three million miles away.

0:01:15.0	T	Ninety-three million miles. Does that vary or change?
0:01:17.6	SS	No, sir.
0:01:18.5	T	No. No. OK.
0:01:21.1	T	And the third factor we know is Earth′s inclination, yes?
0:01:25.7	SS	Yes.
0:01:26.3	T	How many degrees?
0:01:27.3	SS	Twenty-three and one half.
0:01:30.1	T	OK. Twenty-three and a half degrees. From vertical. Not the tilt, inclination. Yes? OK.
0:01:37.6	T	And it maintains that inclination forever.
0:01:41.1	SN	It doesn′t wobble.
0:01:42.1	T	It … it … min … minimally. Minimally.
0:01:45.9	T	As it rotates on its axis, it is revolving around … we are revolving around the …
0:01:51.8	SS	Sun.
0:01:52.5	T	Sun. Good. All right, questions?
0:01:56.8	T	Let′s take a look at our handout.