Identifying Student Thinking Lens Strategies (Answer Key)

STL Strategy	Evident in Video Clip	Evidence from Video Clip 4.2
1. Ask questions to elicit student ideas and predictions.	1 2 ③ 4 5 Not at all Very	Examples of elicit questions from the video clip: 00:30: "What did you guys notice?" 00:39: "Alex, what did you notice?" 00:47: "What else did you notice?" 00:59: "Can anyone add anything else that you noticed?" 01:16: "What else did you notice?" The teacher doesn't appear to have one particular answer in mind and gets many different student responses.
2. Ask questions to probe student ideas and predictions.	1 ② 3 4 5 Not at all Very	Examples of probe questions from the video clip: 01:11: "That there was Sun on the chart?" 01:33: "How do you know that that was 11, Eric?" (Could also be considered a challenge question.) 05:04: "What did you say?" (A weak probe question. The teacher couldn't hear the student.) 05:41: "What do you mean by longer?
3. Ask questions to challenge student thinking.	1 2 ③ ④ 5 Not at all Very	Examples of challenge questions from the video clip: 01:33: "How do you know that that was 11, Eric?" (Could also be considered a probe question.) 01:43: "How does it tell you?" 04:10: "What pattern do you notice with sunny and cloudy?" 04:29: "What did you notice about sunny and cloudy here on our graph?" 06:00: "Which one has more?" (The teacher is asking students to interpret the data on the graph.) 06:20: "How do you know?" 06:26: "What does that tell you?" 06:54: "How do you know?"

STL Strategy	Evident in Video Clip	Evidence from Video Clip 4.2
4. Engage students in analyzing and interpreting data and observations.	1 2 3 4 ⑤ Not at all Very	Throughout this entire clip, the teacher supports students in analyzing and interpreting graphical data to compare weather patterns.
5. Engage students in constructing explanations and arguments.	1 ② 3 4 5 Not at all Very	From segment 06:20–7:07, the teacher is trying to get Paolo and Pedro to support their ideas with evidence. Pedro comes up with comparing 16 sunny days to 11 cloudy days on the weather chart. The teacher helps students construct rudimentary explanations.
6 Engage students in using and applying new science ideas in a variety of ways and contexts.	① 2 3 4 5 Not at all Very	It's too early in the lesson sequence for the teacher to use this strategy.