

## Transcript for Video Clip 2.2

Teacher/video ID:	Griffin, 2.2_mspcp_gr.2_matter_griffin_L2_c2
Content area:	Properties of matter
STeLLA strategy:	Ask questions to probe student ideas and predictions (STL strategy 2). Ask questions to challenge student thinking (STL strategy 3).
Context:	At the beginning of a lesson on matter, students predict what would make ice/water, chocolate, and crayons melt or freeze. In this clip, the teacher asks students to describe what they think would happen if they held a piece of chocolate in their hands.

### Video Clip 2

Time Code	Speaker	Discussion
00:00:00	T	What would happen if you held a piece of chocolate in your hand? Sarah.
00:00:05	SN	It would melt.
00:00:06	T	It would melt.
00:00:07	S	If your hand's hot.
00:00:08	T	Ooh, I heard the word <i>hot</i> . Because your hand is hot. So that ha— Why does it happen? You think it's 'cause it hot ... it's hot? OK.
00:00:17	T	So why doesn't it happen when the chocolate sits on the table? It's different than the ice. Why doesn't it melt? John Michael.
00:00:24	SN	Because it's a solid. And it ... if it was in really hot weather, it might, like, melt into a chocolate, like, cream.
00:00:33	T	OK.
00:00:34	S	It'd have ... have to be, like, really hot.
00:00:36	T	So if it was, like, 100 degrees outside ...
00:00:38	S	Uh-huh.
00:00:39	T	and you didn't have the air conditioning in your house, maybe the table would get hot enough where the chocolate would melt?
00:00:44	S	Yeah.
00:00:45	T	That's what you're thinking?
00:00:46	S	Or maybe you put it, like, in an oven in a bowl, and it melts.
00:00:49	T	OK. OK. So if you put [the chocolate in] an oven in a bowl, it would melt? OK. Because what are you ... what are you adding?
00:00:55	SS	Heat.
00:00:56	T	OK. OK. Awesome. So let's see. We just discussed two examples of matter changing from a solid to a liquid, OK?
00:01:06	T	Today's focus question is <i>How can matter change from a liquid to a solid or a solid to a liquid?</i>

00:01:12	T	Can you summarize what caused the matter—the ice and the chocolate—to change in these two examples that we’ve been thinking about? What has caused it to change?
00:01:22	T	Mmm. Alice, if your jacket is a distraction, I’m going to ask you to put it away. Thank you.
00:01:29	T	Miss [inaudible], what do you think?
00:01:30	SN	The heat has caused it to melt.
00:01:32	T	The heat has caused both the butter and ... I mean, both the ... both the ice and the chocolate to melt?
00:01:39	S	Mm-hm.
00:01:40	T	OK. So do we think that maybe heat could be something that would cause something to change from ...
00:01:47	SN	A liquid—
00:01:48	T	from ... from a solid to a liquid, maybe?
00:01:49	SS	Yeah.
00:01:51	T	Interesting. OK. So, yesterday ... or not yesterday. Excuse me. On Wednesday, we had some butter. It didn’t exactly look like this, OK, ’cause that other butter got tossed, OK?
00:02:03	T	So what I did was I melted this butter yesterday, and then I kept it out. What has happened?
00:02:09	SS	It turned to solid.
00:02:10	T	It turned to—
00:02:11	SN	It won’t get out that bowl.
00:02:13	T	OK, but it was ... it was melted. What ... what happened? Who has an idea?
00:02:17	S	Me.
00:02:18	T	Who have I not heard from? Miss Amelia.
00:02:21	S	So when you left it out probably overnight, it must’ve been really cold, so it started to fro ... to freeze the ... the butter,
00:02:38	S	so that way it would be a ... a solid, since nights go superlong, like over one hour.
00:02:47	T	OK. So ... so because I left it out for so long, it turned from a solid to a liquid? And it became hard again. Is that what you’re saying, Amelia?
00:02:58	S	Yeah.
00:02:59	T	OK. I’m sorry that you got distracted. People weren’t being the most respectful listeners. Herman, what did you want to say?
00:03:04	SN	I wanted to say just like a volcano erupt ... it erupts, and so in the volcano, it’s hot because of the fire and stuff.
00:03:17	S	And when it gets out, there’s no fire because it’s out of the volcano and ... and maybe the fire didn’t reach the thing.
00:03:28	T	OK, so ... so when the fire comes out of the volcano ...

00:03:31	S	Yeah.
00:03:32	T	it ... it's ... it's not hot anymore? Like the lava. Is that what you're talking about?
00:03:35	S	Yeah.
00:03:36	T	OK.
00:03:37	S	So the lava ... lava ... just like if it ... it's like ... it's just like if it gets cool. Like it ... everything has in the ... so it would turn, like—
00:03:55	T	Solid?
00:03:56	S/T	Yeah. Becau— / Is that what you're talking about?
00:03:57	S	it would turn into, like, a rock.
00:03:59	T	OK. Interesting. All right, so way to take this example [and] think about something else.