

Transcript for Video Clip 7.1

Teacher/video ID:	Wilde, 7.1_mspcp_gr.3.forces_wilde_L6_c3-4
Content area:	Forces
STeLLA strategy:	Select content representations and models matched to the learning goal and engage students in their use (SCSL strategy D).
Context:	In this lesson on forces and motion, students use arrows to describe the strength and direction of forces acting on objects in various scenarios.

Video Clip 1a

Time Code	Speaker	Discussion
0:00:02	T/SN	... you guys are doing something. / Like now we're applying some force.
0:00:04	T	You are applying force?
0:00:06	S	Yeah, but we're applying the same force.
0:00:09	T	Are they ... a-are they ... girls ... are they applying forces this way?
0:00:13	SS/SS	Yes. / No.
0:00:14	T	Which way are their arms pushing?
0:00:15	SN	Wait.
0:00:16	SN	Oh, wait.
0:00:17	T	Ahhh. OK. So Vicky, you might wanna be on the other side to be ... It's the other one.
0:00:24	SN	They're not ... they're not doing much force, though.
0:00:26	T	So I'm seeing equal-size arrows. What does that mean?
0:00:30	SN	That they're both equal.
0:00:31	SN	That ... that they're not pushing ...
0:00:33	T/S	So they're equal forces. / ... they're not pushing really, really hard.
0:00:36	T	Oh, Storm has a point. Are you guys pushing hard?
0:00:39	SN	No.
0:00:40	T	Braden says yes.
0:00:42	S/T	You're not pushing hard. / Already push ... It looks to me like they're pushing hard. Their hands are shaking. OK.
0:00:47	T	So, then, what happens in the ... part 2?
0:00:50	SN	And then—
0:00:51	SN	One of them wins.
0:00:52	SN	Braden's getting a little bit lower.
0:00:56	SN	Go.
0:01:01	SN	Keeps going back.
0:01:02	T	So it looks to me like Jackson is starting to push even harder. But Eliza, which way is Braden pushing?

0:01:09	SN/T	This way. / Ah. So Vicky's got a big arrow. Eliza has a smaller arrow than Vicky's. So what's happening?
0:01:17	T	Lucy, what's happening?
0:01:18	SN	Jackson has more force than Braden.
0:01:20	T	Jackson's got more force, so is he starting to win?
0:01:23	SN	Yes.
0:01:24	T	Mmm.
0:01:25	SN/SN	And then Braden keeps going. / Oh no!
0:01:26	T	Ohhh, now Braden looks like he got stronger all of a sudden. So Vicky, if Jackson has less force, what's gonna happen to that arrow?
0:01:36	T	Ahhh. So who wins in this situation?
0:01:39	SS/SS	Braden. / Nobody.
0:01:40	T	Braden wins?
0:01:41	SN	Braden.

Video Clip 1b

0:01:43	SN	We're doing a waterslide?
0:01:44	SN	We're doing the waterslide, so...and so...
0:01:52	S	we will be doing...
0:01:55	S	It's hard to explain.
0:01:59	SN	Showing how a waterslide works.
0:02:00	SN	Showing how the waterslide would work.
0:02:02	SN	And all the forces.
0:02:05	SN	So I have the tu- water tube of science. I'm gonna be squirting this, the slide,
0:02:14	S	to add some water.
0:02:16	SN	And since ... and then the water is pushing down the slide part.
0:02:24	S	Well, the thing that's sliding down is pu— The water is pushing it down.
0:02:32	S	And the gravity is also pulling it down.
0:02:37	SN	Can you get me one of the small ones? Small.
0:02:40	SN	[Small.]
0:02:41	SN	[Inaudible]
0:02:46	SN	And then so ... then so the ... since ... so it doesn't keep going, the frict— There's a little bit of friction pushing it back.
0:02:56	T	Ahhh. If it was dry, would that make a difference in the friction?
0:03:01	SS	Yes.
0:03:02	T	Why?
0:03:03	SN	Because there wouldn't be as ... there wouldn't be water to push it down. So it would stay in one place like this.

0:03:10	T	OK. So there would be more friction if there was no water involved?
0:03:19	T	All right. Do you think we have ... they have it right?
0:03:21	SS	Yes.
0:03:22	T	I think so too. Round of applause for this group.