

Teacher/Video ID: Torres/ mspcp\_gr.3.forces\_torres\_12 c3  
Content area: Forces  
STeLLA Strategy: Identify one main learning goal.  
Context: Lesson 2 of 6 on forces and motion. In this activity, students are pushing a chair with a weak, medium and strong force, and using tools to indicate the size and direction a force.

0:00:03 T Riley, he's gonna push it, just a small push. Just a s- a gentle, gentle push. And I want you to pick one of those tools out of the top there,  
0:00:15 T and see if you could show that.  
0:00:17 SN Okay.  
0:00:18 T No, he already pushed it, honey, you're gonna pick a tool out of there.  
0:00:19 S Oh.  
0:00:21 T Can you show with one of those tools what he just did?  
0:00:27 T/S Okay. / Show it.  
0:00:28 T Do you wanna hold it up so everyone can see it? Okay, girls, are you finished? Okay, I need you to be with us, please,  
0:00:37 T 'cause we're running out of time, and we won't be able to finish this activity.  
0:00:46 T Okay, Riley, why did you choose this part?  
0:00:49 S Because it would show it moving just a little bit, because it's small.  
0:00:53 T Okay. So it's a small arrow, it's showing it's only moving a little bit. Did he push it very hard?  
0:01:01 SS No.  
0:01:02 T So, was it just a little short push?  
0:01:05 SS/T Yeah. / Okay. All right. Well then we're gonna let, tell me your name, sweetie?  
0:01:10 SN Zayna.  
0:01:11 T Zayna. You're gonna do the next one, he's gonna do a medium one. Okay? Go ahead.  
0:01:19 SN Oopsie.  
0:01:20 T What happened? What do you notice?  
0:01:23 SN It moved more.  
0:01:24 SN It moved a lot more.  
0:01:26 T It moved more so, Zayna, would you pick one of those tools from the top? And show how w-you could show that?  
0:01:37 SN It did a medium.  
0:01:40 T What did you pick that one?  
0:01:42 SN Because it went further and this one could show better.  
0:01:45 T Okay. It went a little bit f- further and you could show better, a little bit more of a push. Okay.

0:01:53 T Charlie, will you pull all the way back and, and Shareen you're gonna do this last one. Okay and Charlie you're gonna push it almost as hard as you can.

0:02:06 T/SN What do you notice? / Oh.

0:02:07 SN It went a lot farther.

0:02:08 T How far did it go?

0:02:10 S/SN A lot farther. / Six, two inches.

0:02:11 T It went to our five, right?

0:02:13 SN Yeah.

0:02:14 T It went all the way past our five, the front leg did. So, Shareen, would you pick a tool that would show that?

0:02:24 SN (Inaudible).

0:02:26 SN/SN Probably two of those. / (Inaudible).

0:02:27 SN Two and a half.

0:02:29 SN Two and a half.

0:02:30 SN That's a (half of that?).

0:02:31 SN (Inaudible).

0:02:33 SN That's like one inch.

0:02:35 SN/T Yeah. / All right, so why did you pick that one, Shareen?

0:02:37 SN Because the chair went farther and this one's longer.

0:02:42 T Okay, what about Charlie? What did Charlie have to do with that one?

0:02:46 S He pushed it farther.

0:02:47 T Did he push it further?

0:02:49 SS/T Yes. / Did he go further with it?

0:02:51 SS No.

0:02:52 T What'd he do? What was different?

0:02:53 SN (Inaudible).

0:02:54 SN He stepped and then he pushed it.

0:02:56 SN/SN I stepped and (inaudible). / (Inaudible).

0:02:58 SN He put more force into it?

0:02:59 T He put more force into it, okay. All right, so, do you think as scientists that we could use arrows like this to help us show our force?

0:03:09 SS Yes.