

Transcript for Video Clip 8.1

Teacher/video ID:	Wilde, 8.1_mspcp_gr.3.forces_wilde_L4_c5
Content area:	Forces
STeLLA strategy:	Make explicit links between science ideas and activities (SCSL strategy F).
Context:	In this lesson on forces and motion, students consider the forces that started a toy car moving down a ramp in a previous activity to set the stage for considering why the car stopped at different distances on different surfaces.

Video Clip 1

Time Code	Speaker	Discussion
0:00:02	T	So with the car and the ramp, with the tiles and the carpet, what was the force that made the car start moving?
0:00:12	T	When we did that last week, what was the force? Wyatt?
0:00:15	SN	Gravity?
0:00:16	T	Gravity. Why do you say gravity?
0:00:18	S	Because we put it ... 'cause we put it on the block, and then we'll just let go, and then gravity was pushing it.
0:00:26	T	Ah. Did you push the car down the ramp?
0:00:29	SS	No.
0:00:30	T	No. You just kinda let go of the car, and it went, right?
0:00:33	SN	Yep.
0:00:34	T	So did gravity push it down the ramp, or what did gravity do with the car?
0:00:41	T	Will, what did gravity do with the car?
0:00:45	SN	Was making it go down when you put it on the ramp and let go.
0:00:49	T	OK, so did it push it or pull it?
0:00:51	S	Pull it.
0:00:52	T	Pull. Awesome, Will. So what's—
0:00:55	SN	It's like hands are pulling.
0:00:57	T	It is kind of like hands are pulling, that's right. Was the force that made the car start moving the same, or different, when the car moved over different surfaces?
0:01:08	T	So did the force change when it went over the carpet versus when it went over the tile?
0:01:13	SN	Yeah.
0:01:15	T	Did it?
0:01:16	SN/SN	No. / Yeah.
0:01:17	T	I'm asking. If you've got an answer, raise your hand. Did the force itself change? Eliza?
0:01:23	SN	Yes.

0:01:24	T	Why?
0:01:25	S	Well, because of the carpet, it has the stuff that ... or small or big, and sometimes there's one that can make it stop. So, like, if you push it,
0:01:39	S	sometimes it will move and then stop. And on the ... cardboard, I think that it's called, once you push it, it has a smooth surface so it'll move.
0:01:49	T	OK, so are you saying there's a force that stopped it sooner with one than the other?
0:01:53	S	No.
0:01:55	T	What about the force that made it start moving? What did we say that was?
0:02:00	T	What made the car start moving, Brandon?
0:02:02	SN/T	Gravity? / Gravity.
0:02:0e	T	Did gravity change?
0:02:07	SN	Yes.
0:02:08	T/SN	Xander? / No.
0:02:09	T	No? Why not?
0:02:11	S	Because gravity always stays the same no matter what.
0:02:15	T	Oh, gravity is always staying the same.
0:02:19	T	So what we're gonna talk about today is the car itself actually stopping because gravity didn't change, right?
0:02:25	SN/SN	Mm-hm. / Yes, it did.
0:02:27	T	But the car stopped with the different surfaces sooner or later, didn't it?
0:02:32	S	Yes.
0:02:33	T	So we learned with the tile, the car went further, and with the carpet, it didn't go nearly as far, right?
0:02:38	SS	Yes.
0:02:39	SN	No.
0:02:40	T	So there's something else involved.
0:02:42	T	Interesting! So today we are gonna do our focus question: <i>What makes an object slow down and stop?</i>