SF_Energy_Activity_Clip_2_Commentary_Transcript
Next Moves

I liked Kervin's idea about the stretched out rubber band because he was adding a cause to some of the things he had experienced while working with the toy cars. The car went faster *because* the rubber band had more energy. The rubber band had more energy *because* it was stretched more. His statement was also consistent with what he had experienced with the rubber band. The class had come to a consensus, through testing, that a car shot out of a tightly stretched rubber band went further and faster than one shot out of a lose rubber band.

It seems that Kervin was trying to apply the same concepts to the ramps when he said that ramp number 2 (the one that was least steep) had the most energy. During the tests with the ramps on the previous day, the class usually agreed that the car going down this ramp went the farthest. The two steepest ramps usually caused the car to crash at the bottom. Kervin (along with some other students in the class) had also decided that if the car went the furthest, it also went the fastest. Therefore, since ramp number 2 caused the toy car to travel to furthest, it went the fastest, which meant (from these students' point of view) that the ramp had the most energy. Tracy did not agree with Kervin about the amount of energy in the ramps because she felt that a very steep ramp made a car go the fastest, even if the car did not go very far. She seems to have separated the two ideas (faster vs further) and believes that more speed equals more energy. This seemed to frustrate Kervin because he knew from experience that a very steep ramp caused a car to crash at the bottom. Kervin and Tracy have different ideas about what energy is. Tracy seems to be connecting it to speed, while Kervin is thinking about the length of time that something keeps moving,

as evidenced by his comment that the car has more time on the shallower ramp to gather up energy. This might be a good debate for the rest of the class to get in on. Or, perhaps some more conversation is needed about how you can determine when something actually is the fastest, or about why some ramps cause a car to crash and some don't. It seems that these ideas need to be clarified before they can come to an agreement about their ideas of energy.