Ms. Bailey: Ok. Settle down. We have a packed agenda for today... We have a new PBL to start off this unit. Remember to complete all sections of your box chart.

Justice: I want to read.

Angel: You always read. Let me read this time.

Justice: Ok, but don’t mess up my song...

(Man I got that swag, My hat matches my bag...I swag, I surf)

Caroline and Lizzie sing along with Fast Life Youngstaz as they ride down I-75 in Caroline’s new Jeep.

“Turn that up!!!! It’s a bop,” Lizzie shouts over the music as she bobs her head up and down and taps the steering wheel.

“Yeah, that’s my jam too... from elementary school... “Whrrrr, Whrrrr, Whrrrrr...” Caroline’s heart starts beating really fast as she notices blue lights in the rearview mirror.

She immediately takes her foot off of the accelerator, turns the radio down and says, “Ah man, my mother is going to kill me if I get a ticket.”

“I told you to slow down; you were scaring me with your crazy driving. That’s what you get for not listening to me. I don’t know why...”, nags a nervous Lizzie.

“Just be quiet! You weren’t saying all of that when you were doing that bad imitation of singing and swag surfin’ off beat! I should put you out!” exclaims Caroline.

Caroline turns on her signal so that she can make her way towards the shoulder. Just as she switches into the right lane, the police car zooms past her heading towards the Central Avenue exit. Placing her hand over her chest, Caroline says, “Ooooh, I thought he was after me. My heart can’t take all of this stress, I’m going to put this car on cruise control ’cause if I get a ticket, my mom won’t let me drive again until I’m thirty!”

“What are you going to set it to?” asks Lizzie.

“55 mph headed South.”

Andi: Why did she have to say “headed south?” She’s doing too much. That’s not even something we would say.

Blue: (whispers to Andi) that’s how you know the difference between velocity and speed.

Ms. Bailey: Stay focused. We have too much work to do. Justice why don’t you pick up reading from here.
“55??!!! It’s already 12:30. I need at least 2 hours to make it to all of the stores and they close at 7 pm. How long is it going to take to get to the Outlet? At that rate, they'll be closing by the time we get there!”

“We'll have plenty of time to shop. It’s only about 65 or 70 miles from here.”

Caroline turns the radio back up.

(I'm gonna take my horse to the old town road, I'm gonna ride 'til I can't no more...)

Eric: (continues the song singing loudly and inappropriately)... I got the horses in the back, horse tack is attached, hat is matte black, got the boots that's black to match...

Ms. Bailey: (gives Eric the teacher stare down of death, until he is silent), Continue Justice.

Not far from the Tanger Outlet, there is construction work on 75 S. The speed limit has dropped to 40 mph and the sign up ahead says they have 20 miles to go.

Lizzie throws her hands up and shouts: “I give up. Somebody just does not want me to get those new clothes!”

Ms. Bailey: Are they going to make it? What information do we need to know to figure it out? Remember you need at least 3 facts, 3 questions, 3 hypotheses, and as many learning issues as necessary to determine if Lizzie gets to shop til’ she drops.

Questions
1. What is being accomplished by Caroline placing the car on cruise control?
2. How is speed distinguished from velocity? At what speed is Caroline’s car traveling? What is the velocity?
3. How long would it take Caroline and Lizzie to get to the Outlet if they are traveling 55mph? Since Caroline’s not sure how far they are from the outlet, calculate both distances.
4. Given that Caroline and Lizzie are in the construction zone, how long will it take them to get to the Outlet?
5. On the highway, mph is used to record speed. Is this the same unit that would be used by a scientist? Why or why not?
## Cruise Control Box Chart

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