

Navigate: Speed



With your class

How would the speed that the driver is going affect the position and time of the car?

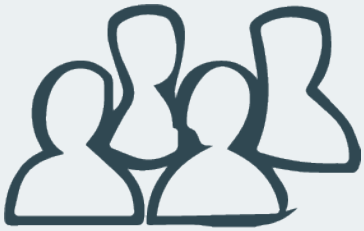
Navigate: Speed



With your class

What could we do to keep track of how this speed changes over time?

Speed

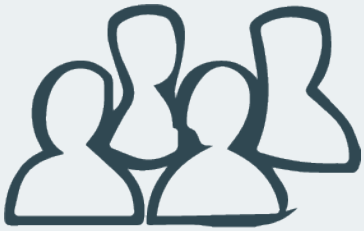


With your group

Plot speed over time for the undistracted driver and the distracted driver on the same graph.

→ Be ready to share with the class and create a public record of our ideas.

Speed



With your group

Use the handout to calculate the impact of speed on reaction distance.

→ Be ready to share with the class.

Speed



With your class

What did the data say about the impact of speed on reaction distance given a fixed reaction time?

Speed



With your class

What can we do to limit people's speeds?

Home Learning



Home Learning

Ask a family, friend, or community member:

1. What are the speed limits in different parts of our community?
2. Have they changed? How?
3. Should they be changed? How, and why?

Speed



With your class

- What did we learn from talking to friends, caregivers, and community members about speed limits in our community?
- What can we do to limit people's speeds?
- How would limiting speeds make driving more safe?

→ Let's keep track of our ideas about possible engineering design solutions.

Engineering Progress Tracker



With your class

Fill in the first row of the *Engineering Progress Tracker*.

Name: _____ Date: _____

Lesson #	What is the design solution?	How do science ideas explain why this solution could keep people safe?	Who does this solution protect? Who does it fail to protect, and why?

Engineering Faster Reaction Times



On your own

Read *Engineering Faster Reaction Times*.

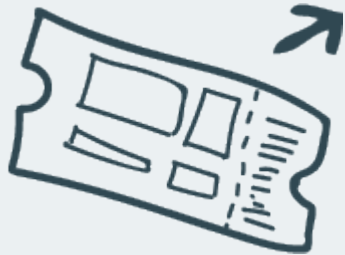


With a partner

Share what surprised you from the reading.
Then fill in your *Engineering Progress Tracker*
using ideas from the reading.

Navigate

Driving is more dangerous when the car is moving faster because the car will travel farther during the time it takes the driver to react. **This means the driver will hit the brakes later and have less time to stop or slow down.**



Exit Ticket

How will speed affect the distance and time it takes to stop **after** the driver hits the brakes?

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