STOP!

STACK THE BLOCKS ACTIVITY

TEST YOUR KNOWLEDGE ON THE RISKS OF SPEEDING



Instructions

Game Components

- Set of activity trivia and scenario cards.
- Set of 100 blocks or the downloadable block grid.

Setup:

1. Set up your activity table/station for people to stack blocks or complete the grid.
2. Choose one person to be the activity facilitator who will read the questions and scenarios.
3. Begin with the trivia cards to test players' knowledge and set up the activity.
4. Scenario Cards: Each card has a driving scenario, and the player must guess the stopping distance in feet based on the speed indicated on the card.
    a. To guess, the player must stack blocks or color in the grid, where each block represents 10 feet.
5. When players are done guessing, show them the correct answer and reward correct answers with some speed-related outreach items from your TDS Resource Kit.

Objective:

- The goal of this activity is to test speeding knowledge and demonstrate that faster speeds require greater stopping distances.

Save a Life™ Texas Department of Transportation

TARGET ZERO

DRIVE SMART COLORADO

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HONDA

1 Brainstorm

What are some potential hazards you might come across on the roadway while driving?



Possible answers may include:

- **Pedestrians**
- **Bicyclists**
- **Animals**
- **Parked/disabled vehicles**
- **Debris/objects in road**
- **Other cars changing lanes or turning unexpectedly**
- **Poor weather**













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2 Question

What does “perception time” mean?

A. Time to fully stop a vehicle
B. Time to notice something
C. Time to react to something
D. Time to decide what to do



B

Perception time is the time it takes you to notice something.

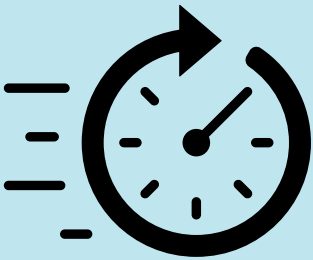
When you are driving, and an unexpected hazard appears, perception time is the time it takes for your brain to process and notice the hazard. During this time, your driving speed usually remains constant.



3 Question

What does “reaction time” mean?

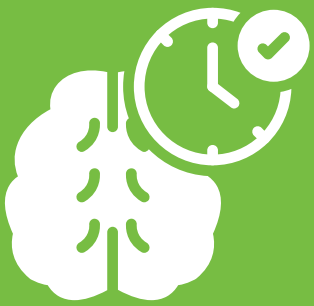
A. Time to fully stop a vehicle
B. Time to notice something
C. Time to plan ahead
D. Time to decide and start responding



D

Reaction time is the time between noticing a hazard and beginning to respond.

First, you must perceive it (notice it), then you must react to it (decide what to do and start doing it). During this time, your driving speed usually remains constant.



4 Question

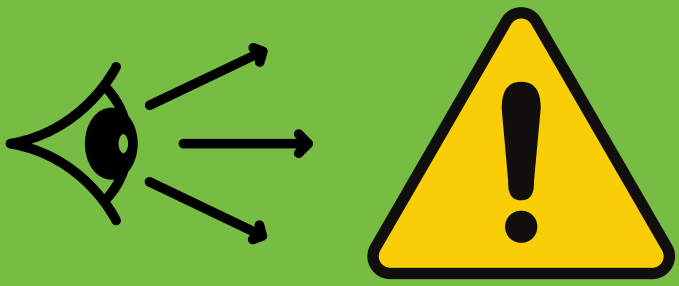
How would you define the term “hazard perception”?

A. Ability to recognize potential dangers
B. Time to notice something
C. Time to start responding
D. Ability to stay focused on the road



A

Hazard perception is the ability to recognize, interpret, and anticipate potential dangers in the driving environment early enough to stay safe.



5 Question

True or False?

Braking distance and stopping distance mean the same thing.





False

Braking distance is the distance traveled after the brakes are applied until the vehicle fully stops. It begins only after perception and reaction time.

Stopping distance is the total distance traveled from the start of a hazard to a complete stop, including perception time, reaction time, and braking distance.

For the Stop! Stack the Blocks activity, all questions refer to stopping distance, not braking distance.

6 Question

What is the perception-reaction time for the average driver?

A. 1.0 second
B. 1.5 seconds
C. 2.0 seconds
D. 2.5 seconds



B

Research estimates driver perception-reaction time as:

- **1.0 sec - alert driver**
- **1.5 sec - average driver**
- **2.0 sec - tired or older driver**
- **2.5 sec - worst-case scenario**

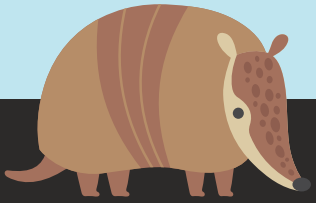
Distraction or extreme fatigue can increase reaction time further.

You can't react to what you don't see.

7 Scenario

You're traveling along the road and an armadillo runs out onto the road. What is the stopping distance if traveling...

5 mph?



1 story!

It can take 12 ft, or about 1 story to stop when traveling 5 mph. That's as tall as a giraffe!





8 Scenario

You're traveling along the road and a cyclist pullls out onto the road. What is the stopping distance if traveling...

15 mph?





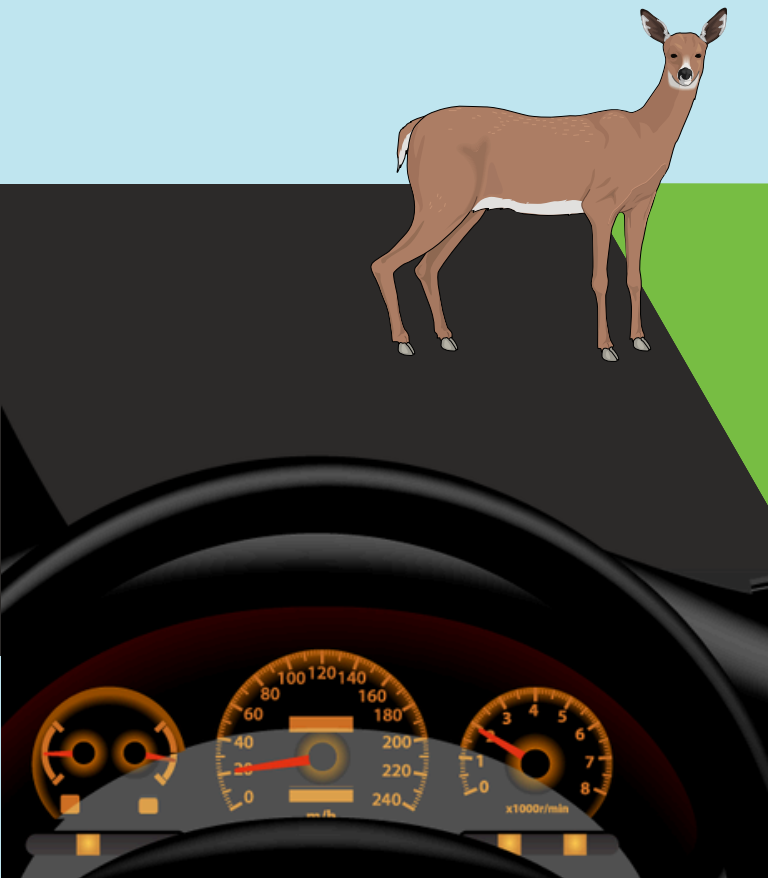
4 stories!


It can take 44 ft, or 4 stories to stop when traveling 15 mph. That's longer than a city bus!

9 Scenario

You're traveling along the road and a deer runs out onto the road. What is the stopping distance if traveling...

20 mph?



6 stories!



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10 Scenario

You're traveling along the road and a pedestrian walks out onto the road. What is the stopping distance if traveling...

25 mph?



8 to 9 stories!



It can take 85 ft, or 8 to 9 stories to stop when traveling 25 mph! That's as tall as Buckingham Palace!



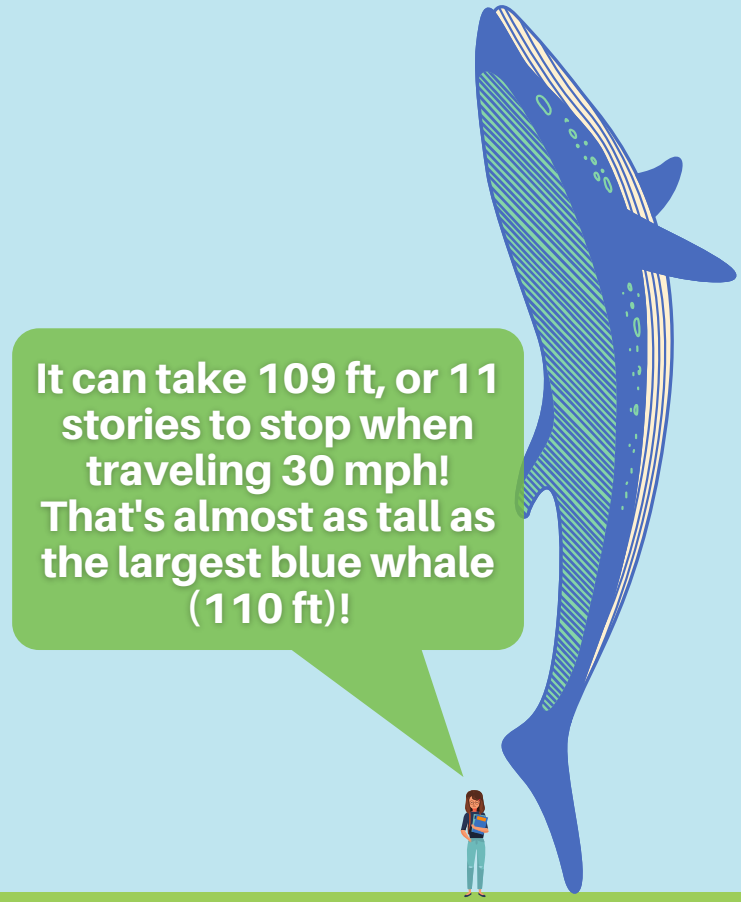
11 Scenario

You're traveling along the road and a car pulls out onto the road. What is the stopping distance if traveling...

30 mph?



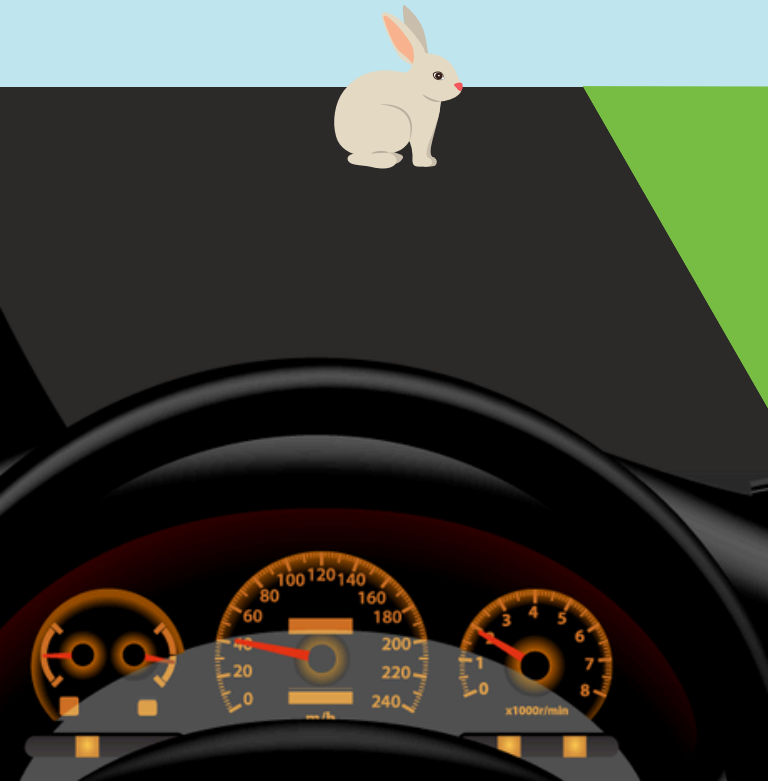
11 stories!


It can take 109 ft, or 11 stories to stop when traveling 30 mph! That's almost as tall as the largest blue whale (110 ft)!

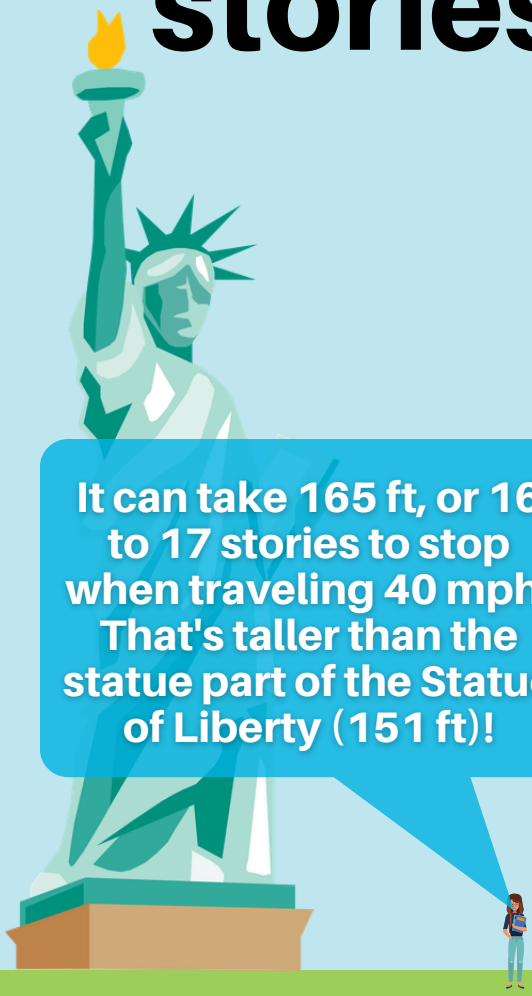
12 Scenario

You're traveling along the road and a rabbit runs out onto the road. What is the stopping distance if traveling...

40 mph?



16 to 17 stories!



It can take 165 ft, or 16 to 17 stories to stop when traveling 40 mph! That's taller than the statue part of the Statue of Liberty (151 ft)!

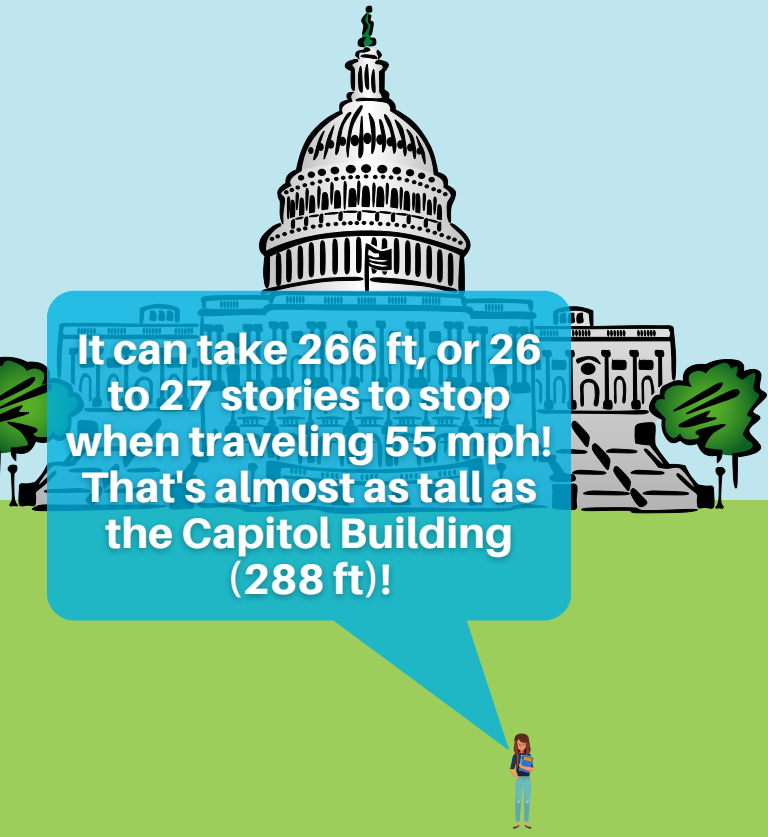
13 Scenario

You're traveling along the road and a truck pulls out onto the road. What is the stopping distance if traveling...

55 mph?



26 to 27 stories!



14 Scenario

You're traveling along the road and you suddenly see debris in the road. What is the stopping distance if traveling...

75 mph?



43 stories!

It can take 434 ft, or 43 stories to stop when traveling 75 mph! That's almost as tall as the Great Pyramid of Giza (455 ft)!

