

# **MELT Class 1 Driver Training**

***Defensive and cooperative  
driving***



# Lesson overview

- Use defensive and cooperative driving strategies
- Identify hazards and conflicts
- Communicate effectively with other road users
- Understand how driving conditions affect safety
- Appreciate how the size and weight of a tractor-trailer affects other road users
- Recognize common situations that lead to crashes and explain strategies to avoid them
- Understand that personal attitudes and good driving habits are key to preventing crashes
- Understand the challenges of driving in adverse conditions.

# Defensive and cooperative driving

What do these mean to you?

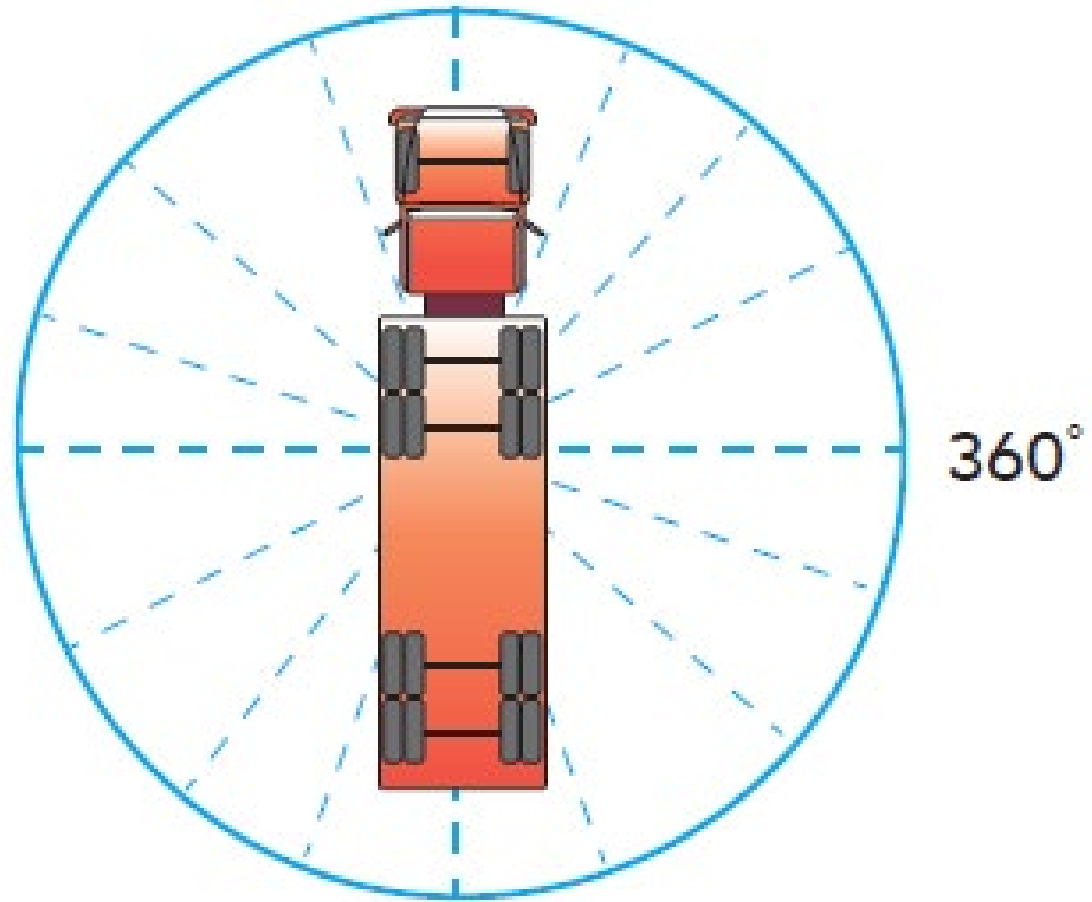


**Defensive  
driving**

**Cooperative  
driving**

**Pro-active  
driving**

# Zones of awareness



# Hazard detection system

See

- Scan and identify any real or potential hazards or conflicts

Think

- Predict and decide

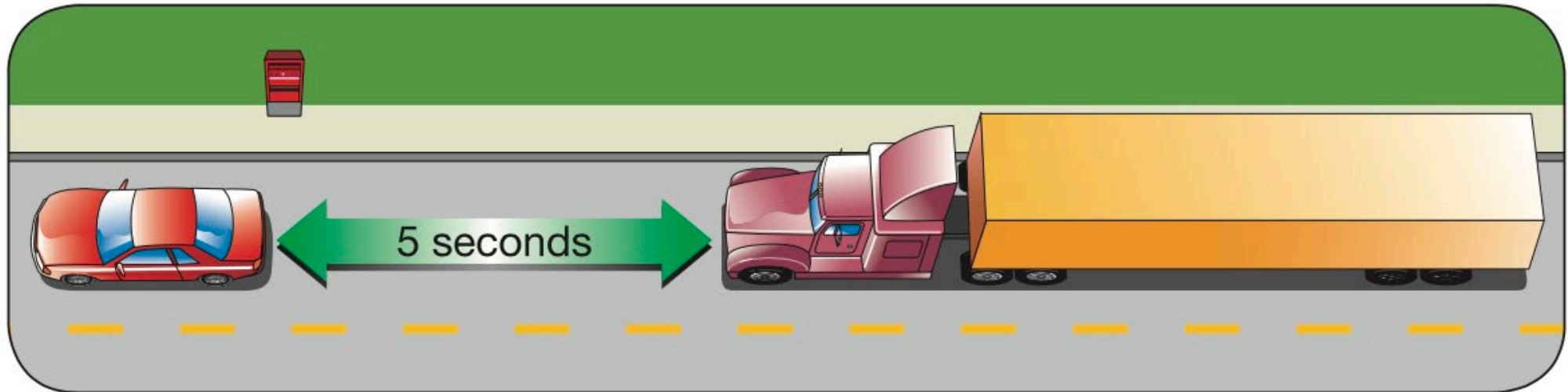
Do

- Execute your decision

# Defensive driving and space management

YouTube video (2:52)

<https://www.youtube.com/watch?v=7u4n2vTHzoo>



(Image source: ICBC Drive Commercial Vehicle Manual)

# Stopping distance and stopping time

Total stopping distance is the distance your vehicle will travel from the moment you:

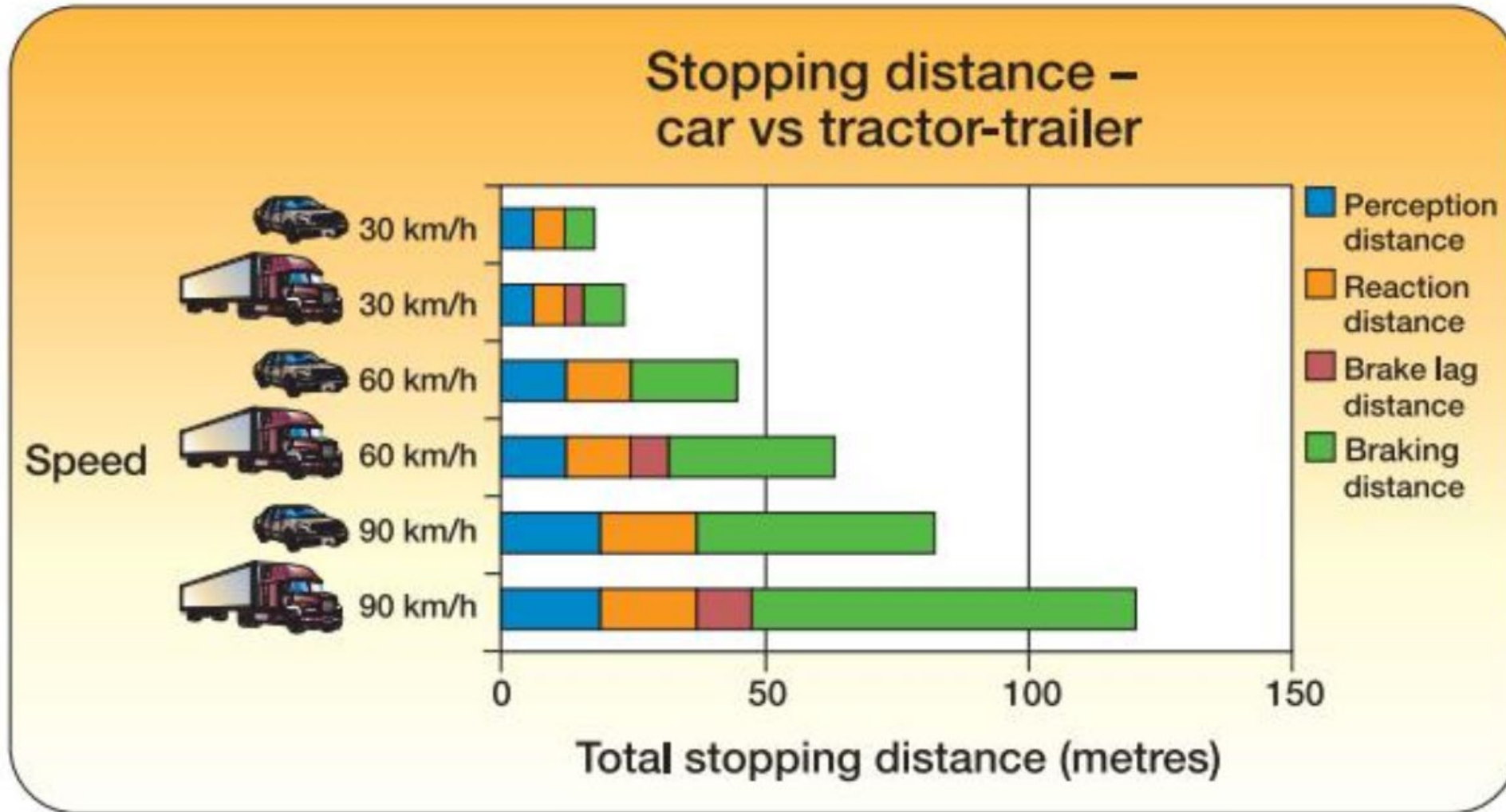
**See** — a hazard

**Think** — decide to stop

**Do** — place your foot on the brake pedal until you stop

It takes about  $\frac{3}{4}$  of a second of perception time to see the problem (see-think) and another  $\frac{3}{4}$  of a second to react (do). Only then will your vehicle begin to slow down.

# Following distance





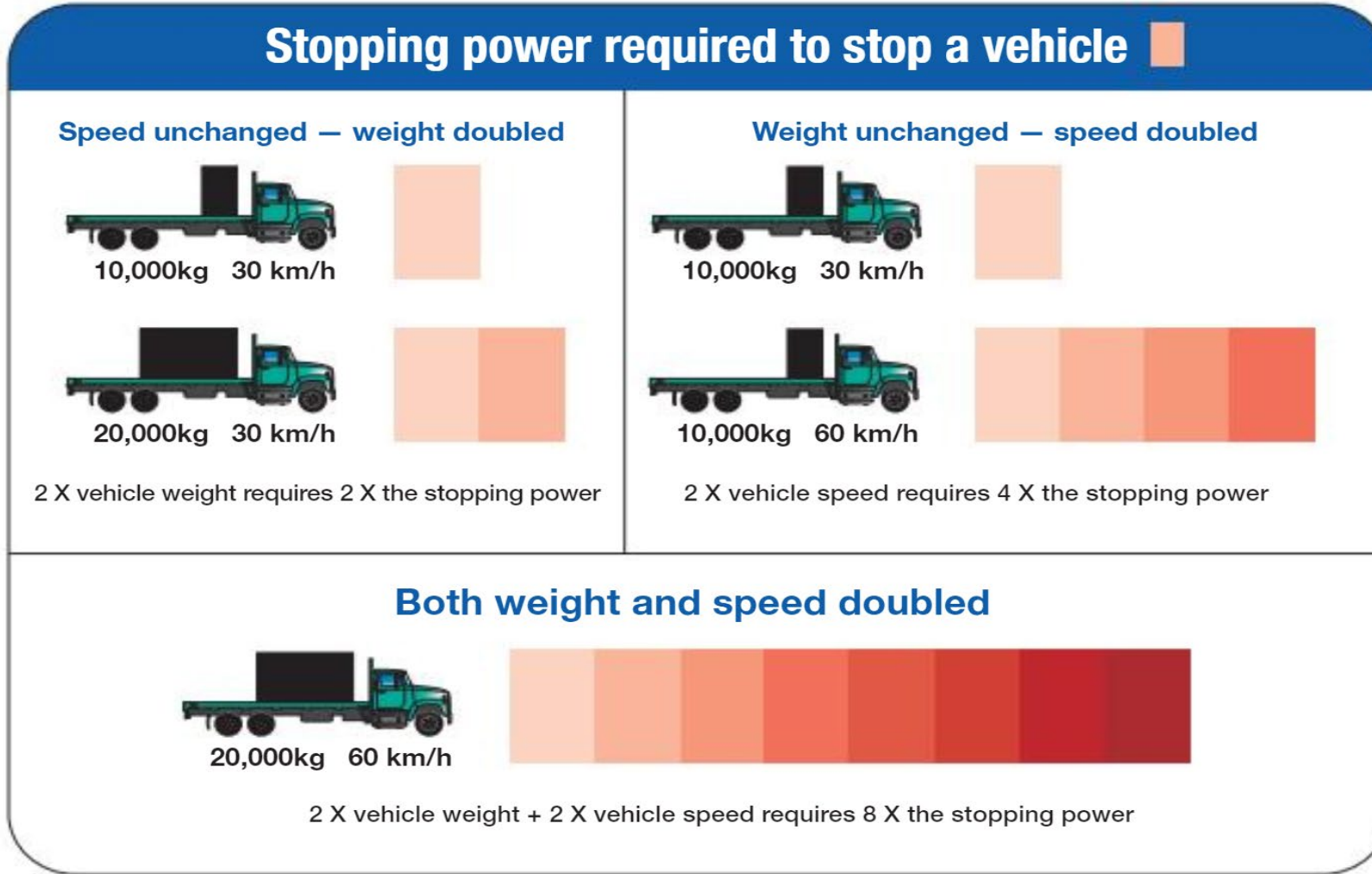
# Speed and weight effects on stopping

Speed and weight affect the stopping power required to stop any vehicle, and how far it will travel before it stops.

You need more stopping power when the speed you're travelling, and/or the weight of your vehicle, increases:

- 2 × vehicle speed requires 4 × the stopping power,
- 2 × vehicle weight requires 2 × the stopping power, and
- 2 × vehicle speed and 2 × vehicle weight requires 8 × the stopping power.

# Stopping power



# Space all around



- In front
- To the sides
- To the rear
- Above
- Below

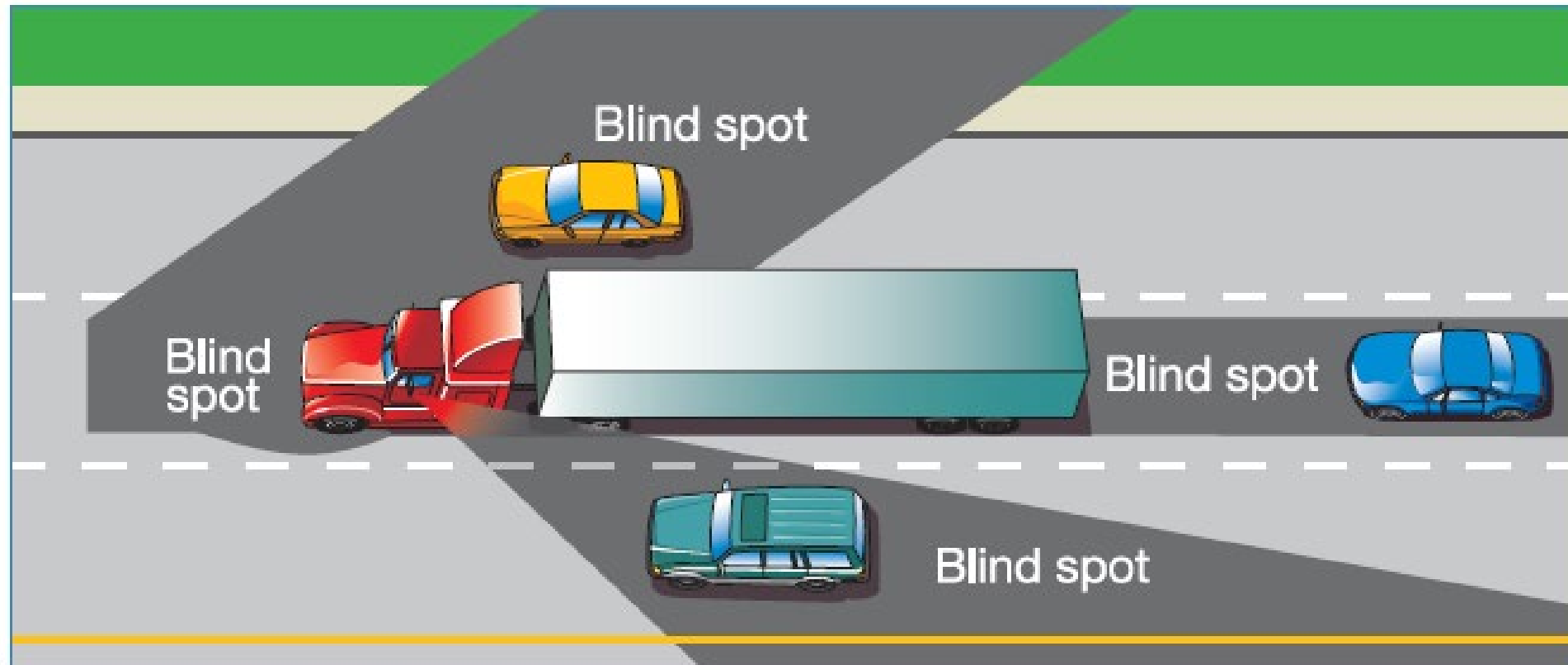
# Developing good visual habits

Keep your eyes moving

YouTube video (41 seconds )

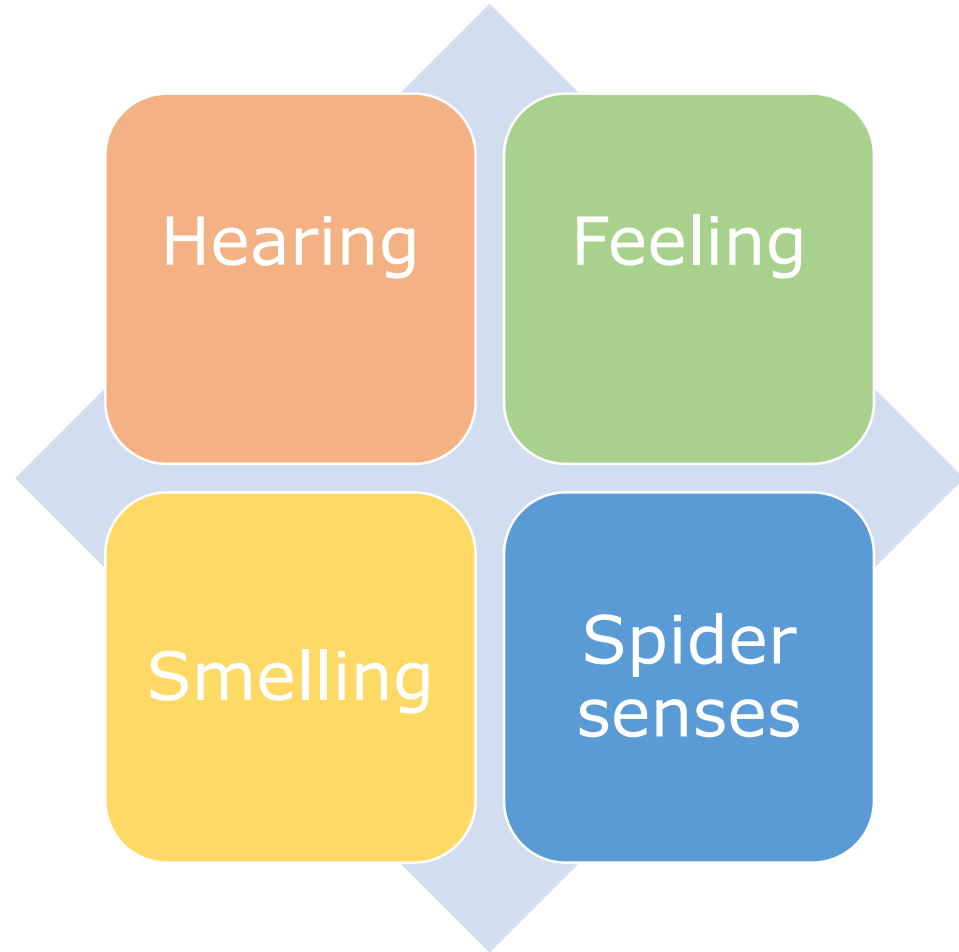
<https://www.youtube.com/watch?v=2INaqewU518>

# Blind spots



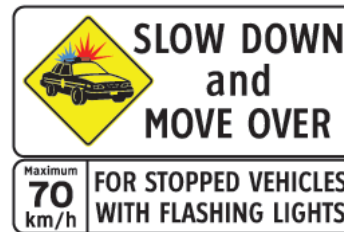
# What can these other senses tell you?

- What would you pay attention to?
- Have you had an experience with this in your own vehicle?
- Discuss in your groups.



# Sharing the road

- Pedestrians
- Cyclists
- Motorcycles and smaller vehicles
- Work zones
- Slow moving vehicles
- Emergency vehicles
- Horses



## Driving conditions – watch for surprises!

Frozen snow from truck smashes car window  
YouTube video(1:08)

<https://www.youtube.com/watch?v=jGNDPHqUslg>



# Six conditions of driving



- Light
- Weather
- Road
- Traffic
- Vehicle
- Driver

# Crash avoidance

1. Vehicle ahead – travelling in same direction
2. Another vehicle passing you
3. Ground clearance such as railway crossing
4. Vehicle behind – travelling in same direction
5. Vehicle approaching intersection or at an angle
6. You passing another vehicle
7. Someone driving beside you
8. Oncoming vehicle
9. Overhead objects

What risks or situations could happen when driving under these situations?

How could you reduce your risk or the risk to others?