

Unit 2: The Driving Task and Environment In Class Resources

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Session 5 Lesson Plan: Driving Maneuvers

Session Goals:

1. Identify all vehicle controls and demonstrate an understanding of their importance as they relate to starting, braking, acceleration, and steering a motor vehicle.
2. Recognize and demonstrate an understanding of the natural laws and forces encountered when driving, and their apparent risk while operating a motor vehicle.
3. Describe and execute important driving maneuvers, including parallel parking, three-point turns, lateral maneuvers and perpendicular/angle parking.

What will students know?

- The potential risk for drivers and their passengers when operating a vehicle without the proper knowledge and skills of vehicle control.
- All the critical procedures and checks before putting their vehicle in motion.
- How to effectively use acceleration, braking and steering to operate and control their vehicle safely.
- Identify all the natural laws and forces that affect common vehicle control.
- Use vehicle controls properly in order to minimize the inherent risks of natural laws and forces.
- Identify basic driving maneuvers.
- Demonstrate an understanding of when and how to perform basic driving maneuvers.

What will students be able to do?

- Demonstrate appropriate knowledge and skills of vehicle control when operating a motor vehicle.
- Identify all the critical procedures and checks before putting their vehicle in motion.
- Maintain efficient control of their vehicle with effective use of the inputs, acceleration, braking and steering.
- Identify all the natural laws and forces that affect common vehicle control.
- Use vehicle controls properly in order to minimize the inherent risks of natural laws and forces.
- Identify basic driving maneuvers.
- Demonstrate an understanding of when and how to perform basic driving maneuvers.

Key Vocabulary and Topics:

- | | |
|--|---|
| <ul style="list-style-type: none">• Steering techniques<ul style="list-style-type: none">○ Hand over hand○ Push and pull• Changing lanes• SMOG• Pulling away from curb• Lateral moves• Oversteering• Understeering• Right hand turns• Left hand turns | <ul style="list-style-type: none">• U-turn• Two-point turn• Three-point turn• Parallel parking• Angle parking• Perpendicular parking• Reference parking points• Uphill/downhill parking• Backing left and right |
|--|---|

Lesson Presentation:

Session Component	Notes
Sample PPT (40 Slides)	PPT includes the following activities and assessments: <ul style="list-style-type: none">• Check for Understanding Activity 1(Slide 12)• Check for Understanding Activity 2 (Slide20)• Check for Understanding Activity 3 (Slide26)• Session Review (Slide 35)
Additional Activities and Assessments	Small Group Activity Driving Maneuvers Assessment

Supplemental Resources:

Suggested Search Terms for Supporting Videos: “performing two-point turn”, “three-point turn”, “parallel parking”

Name: _____

Small Group Activity

Instructions: Break the class up into small groups and provide each group with a scenario that relates to roadway terrain and driving environments. Groups should explain the effective strategies for overcoming these driving forces and natural laws.

Scenarios:

- 1. Uphill road**

- 2. Downhill road**

- 3. Sharp left curve**

- 4. Downhill curve**

- 5. Dirt road**

Name: _____

Driving Maneuvers Assessment

1. It is recommended that you use your turn signal approximately 100 feet before executing your turn. (T/F)

2. When parking with the front of your vehicle facing downhill you should
 - a. Make sure that your vehicle is in park
 - b. Secure your parking brake
 - c. Turn your wheel all the way to the left
 - d. All of the above

3. The acronym S.M.O.G. represents
 - a. Signal, mirrors, observe and go
 - b. Signal, move, observe and gear
 - c. Signal, mirrors, object and go
 - d. Signal, mirrors, observe and gear

4. K-turns can also be referred to as broken U-turns or three-point turns. (T/F)

5. When executing a parking maneuver, you must roll slow and steer slow. (T/F)

6. The proper hand position on your steering wheel is to have your hands at the 10 and 2 hand position. (T/F)

7. The steering sequence for a k-turn is
 - a. Right to pull over, left to pull away and left when backing
 - b. Right to pull over, left to pull away and right when backing
 - c. Right to pull over, left to pull away, right when backing and left to complete the maneuver
 - d. Right to pull over, left to pull away, right when backing and right to complete the maneuver
 - e. Right to pull over, left in reverse and right moving forward to complete the maneuver

8. Dry steering is turning the steering wheels while the vehicle is not moving. (T/F)

9. When backing, you turn your wheel in the direction that you want the rear of the vehicle to go. (T/F)

10. What is the first step to take once you spot a parallel parking space?
- Pull sharply over next to the vehicle
 - Put on your signal to pull alongside the vehicle
 - Put your vehicle in reverse
 - Tap your brakes lightly
11. When backing out of a perpendicular parking space, the first step to take is
- Put on your signal
 - Look 360 degrees, like an owl
 - Check your rear-view mirror
 - Check your side mirrors
12. When pulling out of a parallel parking space, a signal is not necessary. (T/F)

Driving Maneuvers- Answer Key

1. It is recommended that you engage your turn signal approximately 100 feet before executing your turn. (T/F)

2. When parking with the front of your vehicle facing downhill you should
 - a. Make sure that your vehicle is in park
 - b. Secure your parking brake
 - c. Turn your wheels all the way to the right
 - d. **All of the above**

3. The acronym S.M.O.G. represents
 - a. **Signal, mirrors, observe and go**
 - b. Signal, move, observe and gear
 - c. Signal, mirrors, object and go
 - d. Signal, mirrors, observe and gear

4. K-turns can also be referred to as broken U-turns or 3-point turns.(T/F)

5. When executing a parking maneuver, you must roll slow and steer slow. (T/F)

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 - a. Right to pull over, left to pull away and left when backing
 - b. Right to pull over, left to pull away and right when backing
 - c. Right to pull over, left to pull away, right when backing and left to complete the maneuver
 - d. Right to pull over, left to pull away, right when backing and right to complete the maneuver
 - e. **Right to pull over, left in reverse and right moving forward to complete the maneuver**

8. Dry steering is turning the steering wheel while the vehicle is not moving.(T/F)

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- Put on your signal
 - Look 360 degrees, like an owl**
 - Check your rear-view mirror
 - Check your side mirrors
12. When pulling out of a parallel parking space, a signal is not necessary. (T/F)

Session 6 Lesson Plan: Driving in Different Environments

Session Goals:

1. After successfully completing this lesson students will understand the major types of roadways that make up the Highway Transportation System, the key differences of driving in rural, urban, and multi-lane settings, and how to manage risk and remain safe while driving on these roads.

What will students be able to do?

- Students will know why it is important to understand changing driving conditions in a rural, urban and multi-lane setting.
- Students will know how to reduce risk and manage space in different driving settings.
- Students will know the specific strategies necessary to remain safe on all roadways that make up the highway transportation system.

What will students know?

- Students will be able to recognize and understand how driving changes and adapts in rural, urban and multi-lane settings.
- Students will be able to identify appropriate techniques and procedures to properly manage risk, time, and space on all roadways in the highway transportation system.
- Students will be able to implement appropriate driving strategies to reduce risk and travel safely on all the roadways that make up the highway transportation system.

Key Vocabulary and Topics:

- | | |
|--|--|
| <ul style="list-style-type: none">• Acceleration lane• Entrance/exit ramp• Expressway• Urban roadway• Rural roadway• Overtaking• Cruise control• Merge point area• Rural roadway• Shared left-turn lane• Slow moving vehicle• Techniques: Isolate, Separate, Compromise, Minimize hazards• Characteristics of different driving environments• Limited visibility, space and traction situations | <ul style="list-style-type: none">• School zone• Advisory speed• Basic speed laws• Point of no return• Yielding right of way• Protected lanes• Collector lanes |
|--|--|

Lesson Presentation:

Sample PPT (64 Slides)	PPT includes the following activities and assessments: <ul style="list-style-type: none">• Driving Environments Brainstorm (Slide 2)• Environmental Hazard Identification Activity (Slides 4, 7, 10, 12)• Identify/Categorize Learning Activity<ul style="list-style-type: none">○ Minimize (Slides 31-40)○ Separate (Slides 43-53)○ Compromise (Slides 55-62)• Minimize, Separate, Compromise Review (Slide 63)
Additional Activities and Assessments	Driving in Difficult Environments Research Activity Driving in Difficult Environments Self-Reflection Activity Driving in Different Environments Journal Activity Defensive Driving Technique Quiz Driving in Different Environments Assessment

Supplemental Resources:

Suggested Search Terms for Supporting Videos: “winter driving”, “driving in fog”, “driving in different environments”

Name: _____

Environmental Hazard Identification Activity

Instructions: List as many driving hazards as you can think of for the below areas.

RESIDENTIAL AREAS:

URBAN (INNER CITY) AREAS

RURAL AREAS

EXPRESSWAYS

Environmental Hazard Identification Activity (KEY)

RESIDENTIAL AREAS:

Children Playing; Parked Vehicles; Driveways (cars backing out); Dogs/Cats; Moving Vans; Garbage Trucks; School Buses; Utility Vehicle/Utility Workers; Mail Delivery (UPS, Fed Ex); Delivery Vehicles; Ice Cream Trucks Pedestrians (Especially Elderly); Bicyclists; Runners; Poor Features; Poor Vision; Emergency Vehicle – RV's

URBAN AREAS

Vehicles Parking; Double Parked Vehicles; Delivery Vehicles; Parking Lots; Bike Lanes; Slower Traffic; Heavy Traffic (jams); Pedestrians (jaywalkers); Distracted Pedestrians; Busy Intersections; Gas Stations; One Way Streets; Protected/Unprotected Turns; Tailgaters; Angry Drivers; Distracted Drivers Public Transport Vehicles

RURAL AREAS

Poor Features & Conditions (Poor Visibility, Poor Space, Poor Traction); Large Animals (Deer, Horse, Cow); Small Animals (Raccoon, Skunk, Cats, Dogs); Speeders; Farm Equipment; Pedestrians; Bicyclists; Horses (Riders, Horse and Buggy)-Blind Curves: Stopped School Bus; Oncoming Drunk, Drowsy, Distracted, or Drugged Driver); Unguarded Rail Crossing; Passer from Behind: Oncoming Passer

EXPRESSWAYS

Wrong Way Driver; Lane Closure; Poor Mergers; Blind Spot Drivers; Bumper to Bumper Traffic; Gridlock; Fog; Ramp Signal Light; Velocitation; Highway Hypnosis; Uphill Entrance Ramp; Disabled Vehicle; Stopped Emergency Vehicle; Left Side Exit; Left Lane Entrance; Wolf Packs; Clover Leaf Entrance; Exit Ramp Overflow; Construction Zones- Lane Signal Lights (X's)

Name: _____

Driving in Difficult Environments Research Activity

Instructions: Research a recent (within the last three years) news article on driving in bad conditions or in a difficult environment. Discuss the obstacles that were faced by the driver(s) and any other road users. Be prepared to share with the class. Make sure to bring a copy of the article to class.

Notes:

Name: _____

Driving in Difficult Environments Self-Reflection Activity

Instructions: Reflect on a previous personal experience with a difficult driving environment, either as the driver or as a passenger.

What was the environment/condition/factor?

Were you the driver or the passenger?

How was it handled? What specific actions were taken by the driver?

What things could have been done better?

What did you learn from that experience and how will it affect your driving behavior?

Name: _____

Driving in Different Environments Journal Activity

Instructions: Your instructor will assign you a driving environment, environmental factor or environmental condition. Reflect on how you would need to adjust your driving behaviors to navigate your assigned environment, factor or condition.

Assigned environment, factor or condition:

What skills would you need to utilize to navigate this environment, condition or factor?

What are your responsibilities as the driver?

What are the potential consequences of driving through this environment, factor or condition?

Name: _____

Defensive Driving Technique Quiz

1. To place more distance (to the left or right) between your vehicle and a single hazard.
Minimize Separate Compromise
2. Moving to the right when going uphill.
Minimize Separate Compromise
3. Slowing down at the top of a hill.
Minimize Separate Compromise
4. An 18-wheeler approaching.
Minimize Separate Compromise
5. Pedestrian walking a dog on the right and a motorcycle approaching.
Minimize Separate Compromise
6. A line of cars approaching on a two-lane highway **and** an oncoming vehicle pulls out to pass in your lane.
Minimize Separate Compromise
7. A bicyclist on the right and he sees you.
Minimize Separate Compromise
8. Vehicles approaching on a two-lane highway **and** the vehicle behind you pulls out to pass you.
Minimize Separate Compromise
9. Obeying a stop sign.
Minimize Separate Compromise
10. Slamming on your brakes for a bicyclist.
Minimize Separate Compromise
11. Speeding up to allow traffic to merge behind you.
Minimize Separate Compromise
12. Stopping for a flagman.
Minimize Separate Compromise

13. On a narrow country backroad, one car approaching on the other side of an underpass.

Minimize Separate Compromise

14. Driving off the road to avoid a head on collision.

Minimize Separate Compromise

15. Using the following terms, (***minimize-separate-compromise***) describe the proper procedure to use when approaching a ***flashing yellowlight***.

Defensive Driving Technique Quiz (KEY)

1. To place more distance (to the left or right) between your vehicle and a single hazard.
Minimize Separate Compromise
2. Moving to the right when going uphill.
Minimize Separate Compromise
3. Slowing down at the top of a hill.
Minimize **Separate** Compromise
4. An 18-wheeler approaching.
Minimize Separate Compromise
5. Pedestrian walking a dog on the right and a motorcycle approaching.
Minimize **Separate** Compromise
6. A line of cars approaching on a two-lane highway **and** an oncoming vehicle pulls out to pass in your lane.
Minimize Separate **Compromise**
7. A bicyclist on the right and he sees you.
Minimize Separate Compromise
8. Vehicles approaching on a two-lane highway **and** the vehicle behind you pulls out to pass you.
Minimize Separate **Compromise**
9. Obeying a stop sign
Minimize Separate **Compromise**
10. Slamming on your brakes for a bicyclist
Minimize Separate **Compromise**
11. On the expressway, speeding up to allow traffic to merge behind you.
Minimize **Separate** Compromise
12. Stopping for a flagman
Minimize Separate **Compromise**
13. On a narrow country backroad, one car approaching on the other side of an underpass.
Minimize **Separate** Compromise

14. Driving off the road to avoid a head on collision

Minimize

Separate

Compromise

15. Using the following terms, (*minimize-separate-compromise*) describe the proper procedure to use when approaching a *flashing yellowlight*.

Separate the hazards (slow down by at least 1/3 of the speed limit) and

Compromise (yield/stop to avoid a collision) if necessary.

Name: _____

Driving in Different Environments Assessment

1. The basic speed law is
 - a. In effect when signs say it is.
 - b. Cannot be enforced by police officers.
 - c. Applicable in all driving environments
 - d. An artificial law

2. Which type of roadway has the highest number of hazards per mile?
 - a. City streets and roads
 - b. Rural interstate highways
 - c. Rural highways
 - d. Suburban roadways

3. You can avoid being hit by a tailgater if you
 - a. Move to the left side of your lane
 - b. Look in the rearview mirror and warn the tailgater
 - c. Increase your following distance to 4 seconds or more
 - d. Keep steady pressure on the brake

4. If you are being tailgated and need to make a stop, you should
 - a. Stop abruptly
 - b. Flash your brake lights ahead of time
 - c. Slow sooner to make a gradual stop
 - d. Both B and C are correct

5. The place beyond which you cannot stop safely without entering an intersection is the
 - a. Point of no return
 - b. Total stopping distance
 - c. Point of maximum safety
 - d. Stopping point

6. You are driving on a city street and have the green light. A pedestrian begins to cross the street ahead of you. You
 - a. Should tell the pedestrian to return to the curb.
 - b. Can continue without any change in speed or vehicle position
 - c. Must stop regardless of the signal light
 - d. Should quickly change lanes

7. How do traffic deaths on rural roadways compare with those on urban roadways?
 - a. The number of deaths is the same on both types of roads.
 - b. There are fewer deaths on rural roads than on urban roads.
 - c. Twice as many deaths occur on urban roadways.
 - d. Twice as many deaths occur on rural roads.

8. Determining safe speed is the
 - a. Easiest decision in rural driving.

- b. Most difficult part of rural driving.
 - c. Most important decision in rural driving.
 - d. Least understood factor in rural driving.
9. What happens to vehicle control at higher speeds?
- a. It becomes easier
 - b. It is more difficult
 - c. It becomes less important
 - d. It is the same as at lower speeds
10. Rural highways, especially older ones, tend to present
- a. Traffic signs
 - b. Lane markings
 - c. Traffic controls
 - d. Roadside hazards
11. When should you slow to the advisory speed posted for a curve?
- a. Just as your vehicle reaches the curve
 - b. Before entering the curve
 - c. When you reach the sharpest part of the curve
 - d. Throughout the entire curve
12. Which of the following does not represent a common potential conflict in rural driving?
- a. Animals on the road
 - b. Being tailgated
 - c. Slow-moving vehicles
 - d. Oncoming traffic
13. When is it permissible to back up on an entrance ramp or on an expressway?
- a. When traffic is slow
 - b. Never
 - c. When no police cars are visible
 - d. Only when you see a gap in traffic
14. How can you distinguish between an entrance ramp and an exit ramp?
- a. Entrance ramps are always on your right
 - b. The entrance ramp has an ENTER sign
 - c. Exit ramps are always on your right
 - d. The exit ramp has a WRONG WAY sign or DO NOT ENTER signs
15. Traffic is heavy on the expressway and you cannot find a gap as you attempt to enter expressway traffic. How should you warn the driver behind you?
- a. Pull onto the shoulder
 - b. Turn on your right turn signal
 - c. Flash your brake lights
 - d. Turn on your hazard flashers
16. If there is no gap in traffic as you are attempting to enter the expressway, you must
- a. Cause other drivers to yield to you
 - b. Stop on the median and wait for a gap
 - c. Enter the expressway at a slow speed

- d. Slow or stop before entering the acceleration lane or expressway
17. The exit ramp you want to use is entirely blocked by traffic. You should
- a. Use the next exit ramp
 - b. Stop on the expressway until the exit ramp is clear
 - c. Slow and join the overflow traffic
 - d. Pull onto the shoulder and wait until the ramp is clear
18. Express lanes
- a. Have many entrances and exits
 - b. Have few entrances and exits
 - c. Are used for trucks and RVs
 - d. Are designed for use during heavy fog or snow
19. When passing on the expressway, you should always
- a. Change lanes and then signal
 - b. Signal if anyone is close to you
 - c. Accelerate to complete the pass
 - d. Check traffic behind and signal
20. If your vehicle becomes disabled on an expressway, you should
- a. Never stop until off the expressway
 - b. Pull onto the shoulder or median
 - c. Slow down and use emergency flashers
 - d. Drive slowly on the shoulder

Driving in Different Environments Assessment- Answer Key

1. The basic speed law is
 - a. In effect when signs say it is.
 - b. Cannot be enforced by police officers.
 - c. Applicable in all driving environments**
 - d. An artificial law

2. Which type of roadway has the highest number of hazards per mile?
 - a. City streets and roads**
 - b. Rural interstate highways
 - c. Rural highways
 - d. Suburban roadways

3. You can avoid being hit by a tailgater if you
 - a. Move to the left side of your lane
 - b. Look in the rearview mirror and warn the tailgater
 - c. Increase your following distance to 4 seconds or more**
 - d. Keep steady pressure on the brake

4. If you are being tailgated and need to make a stop, you should
 - a. Stop abruptly
 - b. Flash your brake lights ahead of time
 - c. Slow sooner to make a gradual stop
 - d. Both B and C are correct**

5. The place beyond which you cannot stop safely without entering an intersection is the
 - a. Point of no return**
 - b. Total stopping distance
 - c. Point of maximum safety
 - d. Stopping point

6. You are driving on a city street and have the green light. A pedestrian begins to cross the street ahead of you. You
 - a. Should tell the pedestrian to return to the curb.
 - b. Can continue without any change in speed or vehicle position
 - c. Must stop regardless of the signal light**
 - d. Should quickly change lanes

7. How do traffic deaths on rural roadways compare with those on urban roadways?
 - a. The number of deaths is the same on both types of roads.
 - b. There are fewer deaths on rural roads than on urban roads.
 - c. Twice as many deaths occur on urban roadways.
 - d. Twice as many deaths occur on rural roads.**

8. Determining safe speed is the
 - a. Easiest decision in rural driving.
 - b. Most difficult part of rural driving.
 - c. Most important decision in rural driving.**
 - d. Least understood factor in rural driving.

9. What happens to vehicle control at higher speeds?
- It becomes easier
 - It is more difficult**
 - It becomes less important
 - It is the same as at lower speeds
10. Rural highways, especially older ones, tend to present
- Traffic signs
 - Lane markings
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11. When should you slow to the advisory speed posted for a curve?
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 - The entrance ramp has an ENTER sign
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15. Traffic is heavy on the expressway and you cannot find a gap as you attempt to enter expressway traffic. How should you warn the driver behind you?
- Pull onto the shoulder
 - Turn on your right turn signal
 - Flash your brake lights**
 - Turn on your hazard flashers
16. If there is no gap in traffic as you are attempting to enter the expressway, you must
- Cause other drivers to yield to you
 - Stop on the median and wait for a gap
 - Enter the expressway at a slow speed
 - Slow or stop before entering the acceleration lane or expressway**
17. The exit ramp you want to use is entirely blocked by traffic. You should

- a. **Use the next exit ramp**
 - b. Stop on the expressway until the exit ramp is clear
 - c. Slow and join the overflow traffic
 - d. Pull onto the shoulder and wait until the ramp is clear
18. Express lanes
- a. Have many entrances and exits
 - b. **Have few entrances and exits**
 - c. Are used for trucks and RVs
 - d. Are designed for use during heavy fog or snow
19. When passing on the expressway, you should always
- a. Change lanes and then signal
 - b. Signal if anyone is close to you
 - c. Accelerate to complete the pass
 - d. **Check traffic behind and signal**
20. If your vehicle becomes disabled on an expressway, you should
- a. Never stop until off the expressway
 - b. **Pull onto the shoulder or median**
 - c. Slow down and use emergency flashers
 - d. Drive slowly on the shoulder

Session 7 Lesson Plan: Sharing the Road

Session Goals:

1. Identify all road users and types of transportation that they use.
2. Understand their characteristics, limitations, and special considerations.
3. Explain the importance of communication as a means of preventing crashes.
4. Predict and anticipate the errors of other road users to avoid crashes.

What will students know?

- Who the different types of road users are and how they are using the road.
- The unique limitations of different types of road users.
- Special considerations of the different road users, to keep all road users safe.
- Why it is important to share the road, and that all road users have a right to use the road.
- How to communicate with other road users in a safe and respectful manner.
- That human error is the cause of almost all collisions.
- The 4 vision errors, the reasons drivers fail to yield the right-of-way, and why errors in speed, distance, and time requirements cause collisions.

What will students be able to do?

- Identify the different types of road users and describe how they are using the road.
- Describe the limitations and how it applies to different road users.
- Describe special considerations for each of the other road users.
- Explain why it is important to share the road and understand that all road users have a right to use the road.
- Communicate with other road users in a safe and respectful manner.
- Identify the leading cause of almost all collisions as human error.
- Predict and anticipate the errors of others, as discussed in the lesson, to avoid collision.

Key Vocabulary & Topics:

- | | |
|---|--|
| <ul style="list-style-type: none">• Sharing the road with other users:<ul style="list-style-type: none">○ Pedestrians<ul style="list-style-type: none">▪ Mid-block crosswalks○ Construction workers○ Bicycles and mopeds○ Large Trucks & RV's "No-zones"<ul style="list-style-type: none">▪ Off-tracking - rear wheels▪ Roll Over hazards○ Emergency vehicles<ul style="list-style-type: none">▪ Move-over laws▪ Emergency vehicle procedures○ Farm vehicles○ Horse and buggies | <ul style="list-style-type: none">• Braking Time/Distance<ul style="list-style-type: none">○ Total stopping distance• Truck escape ramp (TER)• Turbulence• Underride collision• Work zone• Stop line vs crosswalk• Crossing, Joining, Leaving Traffic• Five Traffic Conflict Situations<ul style="list-style-type: none">○ Intersection vehicles and pedestrians○ Oncoming vehicles○ Entering and existing vehicles○ Vehicles ahead of you○ Vehicles behind you |
|---|--|

Lesson Presentation:

Session Component	Notes
Sample PPT (40 Slides)	PPT includes the following activities and assessments: <ul style="list-style-type: none">• See! And Be Seen! Video Discussion (Slide 13)• Large Truck Discussion
Additional Activities and Assessments	Road User Journal Activity Communication While Driving Activity Sharing the Road Assessment

Supplemental Resources:

Suggested Search Terms for Supporting Videos: "sharing the road"

Name: _____

Road User Journal Activity

Instructions: Name at least 5 different road users and include the following for each:

- **Characteristics**
- **Limitations**
- **Special considerations**

Name: _____

Communication While Driving Activity

Instructions: Define communication and give 4 methods of safe and effective communicating while driving.

Name: _____

Sharing the Road Assessment

1-5. Identify 5 Different Road Users (1-5)

1. _____
2. _____
3. _____
4. _____
5. _____

6-8. Explain the steps you should take when approached by an emergency vehicle. (6-8)

- a. _____
- b. _____
- c. _____

9. Why do drivers have a responsibility for avoiding collisions with motorcycles?

- a. Vehicles need less stopping distance
- b. Motorcycles maneuver more easily
- c. Drivers have more protection
- d. Motorcyclists have less experience

10. Which of the following would NOT cause a bicyclist to make a sudden maneuver?

- a. vehicle door opening
- b. storm drain
- c. pothole
- d. sign stating "bike route ahead"

11. When you pass a motorcycle you:

- a. don't have to make a full lane change since they are so small
- b. should honk your horn as you approach them
- c. give them as much, if not more, room than you would any other vehicle
- d. none of the above

12. You should avoid driving for extended periods of time beside a large truck because?

- a. they may blow a tire
- b. they have large blind spot and may not realize you are there
- c. dirt, dust, and smoke may cause visibility problems
- d. none of the above

13. "No Zones" refer to:
- blind spots of a large truck
 - right lane for a bicycle
 - shoulder of road when an emergency vehicle is approaching
 - 4 second following distance behind a tractor trailer
14. You might expect to see an SMV sign on which of the following vehicles?
- transit bus
 - motorcycle
 - tractor-semitrailer
 - tractor
15. When do pedestrians have the right-of-way?
- pedestrians have the right-of-way at controlled intersections
 - in marked crosswalks
 - always
 - all of the above
 - a & b only
16. True or False?
- No Pedestrian shall unnecessarily stop or delay traffic while in a marked or unmarked crosswalk." The pedestrian must give the motorist the right-of-way at all areas other than marked crosswalks and controlled intersections.
17. What type of vehicles should a driver pull to the side of the road for?
- ambulance
 - fire trucks
 - police vehicles
 - school bus
 - all of the above
 - a, b & c only
18. Explain the hand signals used while driving.
- left hand signal
 - right hand signal
 - stop
19. The three common vision errors that drivers fail to check are.
- mirrors
 - blind spots
 - looking over shoulder
 - all of the above
20. What should a driver do when passing horses, horse-drawn carriages, and farm equipment?

- a. refrain from horn use
- b. slow down
- c. give extra room when passing
- d. all of the above

Name: _____

Signs Signals and Roadway Markings Assessment

1. The weather can affect your ability to observe and react to a traffic control device. True or False?
2. Failing to obey a traffic signal, stop sign or yield sign can result in three driver violation points. True or False?
3. Match the type of sign with its description:

a) Regulation	Blue sign with white lettering and symbols
b) Warning	Orange sign with black lettering and symbols
c) Destination	Yellow sign with black lettering and symbols
d) Service	White sign with black lettering and symbols
e) Work Area	Green sign with white lettering and symbols
4. A regulation sign is normally what shape?
5. What is the normal shape of a warning sign?
6. What must you do at a STOP sign?
7. What must you do when facing each of the following: a flashing red light, flashing yellow light, steady yellow light, a red light with a green arrow?
8. What does it indicate if an edge line angles in toward the center of the road?
9. What do each of these lines indicate: one broken, one solid, double solid, solid and broken together?
10. If an intersection has crosswalk lines but no STOP line, where must you stop for a red light at that intersection?
11. What type of pavement marking is used to show you which lane you must use for a turn?
12. A red and white triangular sign at an intersection means....

- a. Slow down if an emergency vehicle is approaching
 - b. Look both ways as you cross the intersection
 - c. Always come to a full stop at the intersection
 - d. Slow down and be prepared to stop if necessary
13. A rectangular-shaped sign is....
- a. School crossing sign
 - b. Railroad crossing sign
 - c. Stop sign
 - d. Speed limit sign
14. A diamond-shaped sign is a....
- a. Road hazard sign
 - b. Interstate route sign
 - c. School crossing sign
 - d. Speed limit sign
15. What are the colors of the warning signs that indicate hazards ahead, such as curves in the road or narrow bridges?
- a. Black letters or symbols on a white background
 - b. Black letters or symbols on a yellow background
 - c. White letters or symbols on a blue background
 - d. White letters or symbols on a green background
16. What are the colors of a sign which tells you the distance to the next exit of a highway?
- a. Yellow with black letters
 - b. Black with white letters
 - c. Red with white letters
 - d. Green with white letters
17. Which of the following must you obey over the other three?
- a. A steady red light
 - b. A policeman
 - c. A stop sign
 - d. A flashing red light

Signs, Signals, and Markings Assessment- Answer Key

1-5. Identify 5 Road Users (1-5)

Answers may include....

1. **Pedestrians**
2. **Bicyclists**
3. **Motorcyclists**
4. **Motorists**
5. **Passengers of Public Transport (Buses)**

6-8. Explain the steps you should take when approached by an emergency vehicle (6-8)

Anytime you hear a siren or see flashing lights, you should pull over as far possible and stop, even when on a divided highway. Be sure you move out of an intersection before pulling over and stopping.

9. Why do drivers have a responsibility for avoiding collisions with motorcycles?

- a. vehicles need less stopping distance
- b. motorcycles maneuver more easily
- c. drivers have more protection
- d. **b and c**

10. Which of the following would NOT cause a bicyclist to make a sudden maneuver?

- a. vehicle door opening
- b. storm drain
- c. pothole
- d. **sign stating "bike route ahead"**

11. When you pass a motorcycle you:

- a. don't have to make a full lane change since they are so small
- b. should honk your horn as you approach them
- c. **give them as much, if not more, room than you would any other vehicle**
- d. none of the above

12. You should avoid driving for extended periods of time beside a large truck because?

- a. they may blow a tire
- b. **they have large blind spot and may not realize you are there**
- c. dirt, dust, and smoke may cause visibility problems
- d. none of the above

13. "No Zones" refer to:

- a. **blind spots of a large truck**
- b. right lane for a bicycle
- c. shoulder of road when an emergency vehicle is approaching
- d. 4 second following distance behind a tractor trailer

14. You might expect to see an SMV sign on which of the following vehicles?
- transit bus
 - motorcycle
 - tractor-semitrailer
 - tractor**
15. When do pedestrians have the right-of-way?
- pedestrians have the right-of-way at controlled intersections
 - in marked crosswalks
 - always
 - all of the above
 - a & b only**
16. **True**
17. What type of vehicles should a driver pull to the side of the road for?
- ambulance
 - fire trucks
 - police vehicles
 - school bus
 - all of the above
 - a, b & c only**
18. Explain the hand signals used while driving.
- left hand signal- extend left arm out sideways from driver's window, arm straight fingers extended**
 - right hand signal- extend left arm out driver's window, bending the elbow at a 90-degree angle so that the hand is pointing up and your palm is facing forward.**
 - stop- extend left arm out driver's window, bending your elbow and pointing the hand down toward the road with your fingers extended, with palm facing the drivers behind you**
19. The three common vision errors that drivers fail to check are:
- mirrors
 - blind spots
 - looking over shoulder
 - all of the above**
20. What should a driver do when passing horses, horse-drawn carriages, and farm equipment?
- refrain from horn use
 - slow down
 - give extra room when passing
 - all of the above**

Session 8 Lesson Plan: Physics of Driving and Occupant Restraint

Session Goals:

1. Understand the natural laws and forces that affect their driving daily.
2. Demonstrate and understanding of how traction, tire pressure, tire tread, and braking may impact a driver's ability to respond to the natural forces and driving conditions encountered.
3. Demonstrate knowledge of why occupant protection is important.
4. Demonstrate knowledge of laws related to occupant restraint.
5. Understand that as the driver, they are responsible for ensuring correct occupant protection use within their vehicle.

What will students know?

- Students will be able to list and define the natural laws that can impact driving.
- Students will know and understand the potential hazards of natural laws and driving forces and their subsequent effect on vehicle control.
- The student will know how to minimize the risks of natural laws and forces while driving a motor vehicle.
- The student will understand the three collisions that occur in a crash.
- The students will demonstrate a knowledge of the importance of seat belts and child restraints (car seats and booster seats)
- They will demonstrate a knowledge of the NYS laws pertaining to occupant restraint.
- The student will be able to identify vehicle safety equipment including seat belts, air bags, anti-lock brakes, lane detection, rearview cameras, and forward collision warning & braking.

What will students be able to do?

- Student will be able to list and define the natural laws and forces that affect common vehicle control.
- Students will demonstrate appropriate seat and seat belt positioning, proper securing a child safety seat, and demonstrate knowledge of the restrictions applying to front seat air bags.
- Students will be able to identify a variety of roadway, climate condition, and vehicular conditions that may result in poor tracking.
- Students will be able to properly check tire pressure and treaddepth.

Key Vocabulary and Topics:

- | | |
|------------------------------|---------------------------------|
| ● Gravity | ● Second collision |
| ● Center of gravity | ● Third collision |
| ● Inertia | ● Passive restraint |
| ● Centrifugal force | ● Active restraint |
| ● Kinetic energy | ● Seatbelt |
| ● Vehicle suspension balance | ● Booster seat |
| ● Friction | ● Child car seat / booster seat |
| ● Traction | ● Air bag |
| ● First collision | ● NYS Seatbelt Law |

Lesson Presentation:

Session Component	Notes
Sample PPT (32 Slides)	PPT includes the following activities and assessments: <ul style="list-style-type: none"><li data-bbox="662 317 1252 352">• Matching Key Terms Activity (Slide 29-30)
Additional Activities and Assessments	Vehicle Safety Activity Occupant Restraint Contract Activity Occupant Restraint Consequences Self Reflection Activity Physics of Driving and Occupant Restraint Assessment Unit 2 Classroom Checklist

Supplemental Resources:

Suggested Search Terms for Supporting Videos: “stages of collision”, “importance of seat belts”, “child passenger safety”, “back seat bullet”

Name: _____

Vehicle Safety Activity

Instructions: Using a credible online source, provide a brief description of each of the following vehicle safety technologies.

- **Airbags**
- **Anti-locking braking systems**
- **Electronic stability control**
- **Tire pressure monitoring system**
- **Back-up cameras**
- **Back-up sensors**
- **Parking assist**
- **Voice controls**
- **Adaptive cruise control**
- **Adaptive headlights**
- **Blind spot warning**
- **Lane departure warning**
- **Forward collision warning**
- **Forward collision warning and braking**

Name: _____

Occupant Restraint Contract Activity

Instructions: Using the action plan you created, develop a contract between yourself and your parent/guardian where you commit to use proper occupant protection and to ensure proper occupant protection use among your passengers. Make sure to include both incentives for following the contract and consequences for breaking the contract. Once your contract is complete, bring it home to discuss it with your parents and sign once you and your parents agree on the terms.

See the following resource as an example:

Centers for Disease Control and Prevention: Parents are the Key Parent Teen Driving Agreement

Name: _____

Occupant Restraint Consequences Self-Reflection Activity

Instructions: Reflect on your own experiences with occupant protection and answer the questions below.

1. Are there instances where you didn't use occupant protection correctly or witnessed the incorrect use of occupant protection?

2. What were the consequences?

3. What could have been the consequences?

4. Any other thoughts or comments?

Name: _____

Physics of Driving and Occupant Restraint Assessment

1. What is the primary force that acts on your car when “rounding” a sharp curve?
 - a. Kinetic energy
 - b. Friction
 - c. Gravity
 - d. Centrifugal force

2. An example of a passive restraint is?
 - a. Locking your door
 - b. Adjusting your head rest
 - c. Recessed door handles
 - d. Buckling your seat belt

3. Who is exempt from wearing a seat belt?
 - a. Police Officer
 - b. Nine-month pregnant woman
 - c. Passengers in the front seat
 - d. Nine-year-old in the back seat

4. Air bags usually inflate in collisions at speeds of:
 - a. 5-6 miles per hour
 - b. 1-2 miles per hour
 - c. 10-12 miles per hour
 - d. 20-30 miles per hour

5. A nine-month-old baby in a vehicle should ride in which of the following?
 - a. Rear-facing car seat
 - b. Forward-facing car seat
 - c. Booster seat
 - d. On a mother’s lap

Physics of Driving and Occupant Restraint- Answer Key

1. What is the primary force that acts on your car when “rounding” a sharp curve?
 - a. Kinetic energy
 - b. Friction
 - c. Gravity
 - d. **Centrifugal force**

2. An example of a passive restraint is?
 - a. Locking your door
 - b. Adjusting your head rest
 - c. **Recessed door handles**
 - d. Buckling your seat belt

3. Who is exempt from wearing a seat belt?
 - a. **Police Officer**
 - b. Nine-month pregnant woman
 - c. Passengers in the front seat
 - d. Nine-year-old in the back seat

4. Air bags usually inflate in collisions at speeds of:
 - a. 5-6 miles per hour
 - b. 1-2 miles per hour
 - c. **10-12 miles per hour**
 - d. 20-30 miles per hour

5. A nine-month-old baby in an automobile would be safest in which of the following devices?
 - a. **Rear-facing car seat**
 - b. Forward-facing car seat
 - c. Booster seat
 - d. On a mother’s lap

UNIT 2

(Sessions 5-8)

Classroom Checklist

By the end of Session 8, the student driver should be able to demonstrate competency in the following areas. Use the checklist below to keep track of demonstrated competencies.

Competency	Fully Demonstrates Knowledge	Needs Improvement	Not Knowledgeable
Illustrate the steps to pull away from a curb			
Illustrate the steps to change lanes			
Describe reasons to change lanes			
Illustrate how to make a right-hand turn			
Illustrate how to make a left-hand turn			
Describe the methods of backing up to the left and to the right			
Demonstrate how to conduct a U-Turn			
Demonstrate how to conduct a 2-point turn			
Demonstrate how to conduct a 3-point turn			
Illustrate the steps to parallel park			
Identify the reference points on a vehicle to assist in perpendicular and angle parking			
Demonstrate how to enter/exit a perpendicular parking space			
Demonstrate how to enter/exit an angle parking space			
Illustrate the steps to park on an uphill incline			
Illustrate the steps to park on a downhill incline			
Differentiate the hazards of driving in residential, urban, or expressway environments			
Distinguish between driving in residential, urban, or expressway environments			
Distinguish the difference between the 5 types of expressway			

interchanges			
Describe the process of merging onto/off from expressway traffic			
Describe the concept of minimizing, separating, or compromising hazards			
Describe both formal and informal ways drivers communicate their intentions			
Distinguish between the different types of users of the road and the hazards they may present to the driver - bicyclists, mopeds/scooters, motorcycles, trucks, special purpose vehicles, buses, farm vehicles, pedestrians, and animals			
Describe your responsibilities should you hit pets/domestic animals while driving			
Describe the hazards of railroad crossings			
Define the key terms of gravity, center of gravity, and kinetic energy			
Describe the factors that contribute to single vehicle crashes (gravity, center of gravity, and kinetic energy)			
Describe the different types of road surfaces/conditions on road surfaces that affect traction			
Describe the different substances found on the road and conditions that affect traction			
Describe how different temperature changes on different road surfaces affect traction			
Describe how different road designs can affect traction			
Describe the proper method to check tire inflation			
By looking at the tire wear, determine if the tire is aligned properly or has an inflation issue			
Describe how stopping distance is affected by speed, road surface, tire condition, or weather			

<p>Describe how each of the following devices are considered safety features: crash area zones, energy absorbing bumpers, side door beams, reinforced windshields, energy absorbing steering wheel/ column, padded dash, child safety seats and head restraints</p>			
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