

Chapter 11 - Lesson Plans and Activity Directions

Title: PowerPak

Concepts:

- 11.1 Railroad Crossings
- 11.2 Motorcycles and Trucks
- 11.3 Preventative Maintenance and Driving Green
- 11.4 Organ Donations
- 11.5 Traffic Stops

Prerequisites: Participation in previous sessions, successful completion of assignments, and 80% or better on Chapter 1 and 2 exit exams.

Note: The concepts contained in this chapter may be assigned and presented to learners in whole or in part, at any time during or after Chapter 3.

Time: 2.5 hours

Required Equipment, Lesson Resources and Support Materials:

- ♦ NDRPC 2014 DVD Interface, computer, projector, screen, and speakers
- ♦ Chapter 6 Lesson Plans and Activity Directions, and Overview Notes
- ♦ NDRPC 2014 Playbooks
- ♦ Driving Green Challenge and Key
- ♦ Ticket to Concept 11.4 Key
- ♦ Chapter 11 Exit Exam & Key

Teacher Activities	Participant Activities/Objectives
11.1 Railroad Crossings Time: 20 minutes Objectives <ul style="list-style-type: none"> The learner will be able to describe the unique dangers of railroad crossings. The learner will demonstrate searching and space management techniques needed to prevent problems from occurring. The learner will be able to explain which direction you should run if their vehicle stalls on the railroad tracks with a train approaching. 	
Stay Alert for Railroad Tracks Begin this lesson by asking <ul style="list-style-type: none"> Is a railroad crossing an open, closed, or unstable zone condition? What type of traffic control devices will you find at these intersections? Video PSA: Stay Focused Launch video. Lead learners in discussion about the risks of railroad crossings and how they could avoid the traps of distractions.	Answer questions. Participate in discussion.
Signs, Signals, and Markings Ask learners: <ul style="list-style-type: none"> What is the meaning of a Crossbuck sign or pavement marking? 	Participate in discussion.

Operation Lifesaver Video: Look to Live Launch video. Pause as needed for discussion. Have them explain what to do if their car stalls on the tracks. Explain which way to run if a train is approaching and why. (Move quickly away from the tracks in the direction from which the train is coming. If you run in the same direction the train is traveling, when the train hits your car you could be injured by flying debris.)	Watch video. Explain what to do if their car stalls on the tracks, and which way to run if a train is approaching and why.
Protect Yourself and Others Operation Lifesaver Video: Imagine Launch video and pause as needed. Following the clip, have learners describe proper stopping locations and demonstrate proper searching pattern needed when approaching and prior to crossing tracks.	Describe where to stop at a railroad crossing. Demonstrate proper searching pattern used to approach and prior to crossing this intersection.
11.2 Motorcycles and Trucks Time: 30 minutes Objectives <ul style="list-style-type: none"> The learner will recognize and cooperate with other roadway users, understanding the need to develop awareness of size and speed differences. The learner will be able to explain how to interact safely with motorcycles and trucks. 	
Interacting With Motorcycles PPT with Videos: Sharing the road with motorcycles Launch PPT. Help learners connect space management principles while interacting with motorcycles.	Explain how to search for and interact with motorcycles.
Sharing the Road With Trucks Federal Motor Carrier Safety Administration Video: The Unsafe Driving Acts of Motorists Launch video. Guide class discussion by asking learners to describe the No Zone. Connect to previous lessons regarding space management strategies and principles used to operate a vehicle in the vicinity of large trucks.	Describe the No Zone. Discuss ways to avoid problems when driving in the vicinity of large vehicles.
Space Management Strategies Lead discussion on space management around large trucks: timing side zones, passing and being passed, following time and space, etc.	Recall space management principles used when passing, timing side zones, and following time needed when interacting with trucks.
11.3 Preventative Maintenance and Driving Green Time: 40 minutes Objectives <ul style="list-style-type: none"> The student will recognize the responsibility shared by users of the highway transportation system and the need to pay attention to their role as user and consumer - a primary concern when operating and maintaining a vehicle while keeping environmental issues in mind. The student will learn how various systems operate and how to maintain them. 	
Going Green Begin this lesson by asking learners if anyone's family has a "green" vehicle. Ask if they know what type, gas mileage, etc. to begin a discussion on the advantages and disadvantages of "green" cars.	Share information with the classmates.
Direct learners to the first page of Homework Assignment 11.3 and have them share their findings regarding the cost of transportation in their area. (Learners should have completed this part of the worksheet as they did their pre-assigned reading	Tell what the cost of transportation is in their area.

assignment.)	
Vehicle Maintenance Lead discussion on the cost-saving benefits of keeping a vehicle well maintained. Launch student video “simple maintenance tips” from the play button located on the mid-page photo.	Answer questions. Watch video.
Simple Ways to Save Fuel Begin discussion by asking learners what they might do to save on fuel. Launch Video: Green Driving Tips importance. Driving Green Challenge: Break into teams of 4 to 6. Direct learners to the second half of HA 11.3 Driving Green Challenge - Drive Smart, Maintain & Save. Pass out the Driving Green Challenge (Titled: WS 11.3 - Maintenance and Driving Green Challenge). Give teams 10 minutes to complete the challenge. Then they will share answers or challenge another team to answer. Correct answers are worth 2 points each. The team with the most points wins.	Participate in Driving Green Challenge. Share answers with the class.
11.4 Organ Donations Time: 30 minutes Objective <ul style="list-style-type: none"> The learner will be able to describe the importance of and options for becoming an organ donor. 	
Ticket to Concept 11.4 Lead class through a self or peer evaluation of responses to questions using Ticket to Concept 11.4 Key. Allow students to keep for future reference.	Evaluate responses to E-Ticket 11.4.
Drive Safe, Be Free, and Stay Well Always - But, What if Launch video. Answer questions. Clarify any misunderstandings.	Get motivated, be respectful. Participate in discussion. Ask questions.
A Few Facts Launch video “It’s Your Choice - Donate Life” Class Discussion: Share with a partner, and then discuss as a class your thoughts and opinions about organ donations. Allow learners to share personal opinions freely. Answer questions.	Watch video. Participate in class discussion. Share opinions.
Talk To Your Family Homework: Discuss and share your wishes about organ donation with your family tonight. Lead discussion on the importance of making your own decisions, informing family members, and requirements for consent.	Discuss wishes with family.
11.5 Traffic Stops Time: 30 minutes Objective <ul style="list-style-type: none"> The learner will be able to describe the necessary responses and responsibilities when interacting with Law Enforcement Officers and demonstrate how to interact courteously during a traffic stop. 	
An Officer’s Job Begin this lesson by asking learners what they think an officer’s job really is. Think, Pair, Share Activity: Have students share with a partner any experiences they have had with traffic stops.	Share past experiences with law enforcement.

Launch video “The story of one officer” Reinforce the need to value and respect police officers and the difficulties they may have keeping the peace, protecting the public, and enforcing the law.	Participate in discussion.
You Could Get a Ticket Consider This: What are some reasons a police officer might pull someone over and possible outcomes?	Participate in discussion.
Managing a Traffic Stop & Nighttime and Passengers Launch video “The Routine Traffic Stop” Role Play Activity: Have students practice how to respond to an officer during a traffic stop. Ask for 3-5 learner volunteers at a time. Assign one the role of officer, another to be the motorist, and the others to be passengers. Give them one scenario at a time. Ex: to the motorist - you are pulled over for speeding, not signaling for a lane change, weaving in your lane, etc. What actions should you take? How does an officer approach your vehicle and why? How do you move and act as the officer approaches. What questions might he/she ask? You are pulled over at night for running a yellow/red traffic light.	Watch video. Participate in discussion and role play activity.
Chapter 11 Exit Exam Administer exam, collect and correct. Wrap Up and Adjourn	Learners take chapter 11 exit exam.
Estimated Time: 2.5 hours	

Assessments: Learner may complete Ticket to Concept 11.4 and demonstrate accountability for completing chapter reading assignments. Learner will answer informal questions, and participate in class discussions, demonstrations, and activities. Learner may complete Chapter 11 Exit Exam with a minimum score of 80%.

Student Assignments

- Discuss and share your wishes about organ donation with your family
- Optional Independent Activity - Vehicle Maintenance

11.3 Preventative Maintenance - Activity Directions

Optional Independent Activity - Vehicle Maintenance

Name: _____ **Date:** _____

Directions: With a parent or guardian, or someone designated by your parent or guardian, change a tire on a car, using the procedures listed below. Check for proper tire inflation. Check listed fluid levels, and fill if necessary. Return this worksheet to the teacher by the date assigned.

Check Fluid Levels and Fill

- ☐ Oil
- ☐ Water
- ☐ Brake Fluid

Change a Tire

- ☐ Check that automatic shift car is in park or standard transmission car is in low or reverse.
- ☐ Set parking brake firmly.
- ☐ Block both wheels at front and back of tires with boards or bricks at the opposite end of the car from which the tire is to be changed.
- ☐ Remove all tire-changing equipment and spare tire from trunk or storage area.
- ☐ Pry off hub cap with jack handle or screwdriver.
- ☐ Loosen the lug nuts or bolts slightly with socket wrench or tire-changing (lug) wrench.
- ☐ Use the jack to raise wheel off ground. (Check the car manual for specific jacking instructions.)
- ☐ Make certain the jack is straight.
- ☐ Jack slowly as wheel begins to lift off the ground.
- ☐ Jack just enough so tire clears ground.
- ☐ Check the stability of the car once the wheel is off the ground by gently rocking forward and back and side to side.
- ☐ **If car is not stable, do not remove the tire; let the car down and jack it up again until it is stable.**
- ☐ Remove the lug nuts or bolts and pull off the wheel.
- ☐ **Be careful not to get your hands in a position between the ground and the tire or the tire and the fender where they could be caught while removing or replacing the tire and lugs, should the car fall. Always keep yourself in a position to be able to get away quickly in case the car starts to fall.**
- ☐ Put on the spare tire, replace the lug nuts or bolts, and tighten each at least four or five turns by hand.
- ☐ Tighten two of the lug nuts or bolts on opposite sides of the wheel firmly with the wrench.
- ☐ Lower the jack until the tire is in contact with the ground, but not fully lowered.
- ☐ Tighten firmly all the lug nuts or bolts, with the wrench, in a crisscross pattern.
- ☐ Once you think they are all tight, make one final check of each lug nut or bolt with the wrench.
- ☐ Replace the hub cap and lower the car the rest of the way.
- ☐ Store the tire-changing equipment in the trunk or storage area and remove the blocks from the wheels.
- ☐ Check for proper tire inflation in all tires.

I certify that _____ changed a tire using the procedures as directed above and checked required fluid levels.

Date: _____ Signature: _____ Relationship to Student: _____

Return this signed worksheet to the teacher by the date assigned.