KEYS TO HAPPY MOTORIZING: YOU AND THE DRIVING TASK
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Acknowledgements

This educational material has been prepared in consultation with National 4-H
Automotive Development and Review
Committees comprised of representatives
of Extension Service, United States
Department of Agriculture, the
Cooperative Extension Service of State
Land-Grant Universities, and National 4-H
Council.

Special thanks are extended to the
Firestone Trust Fund, donor for the
National 4-H Automotive Awards
Program, for financial assistance.

This material is published by National 4-H
Council, 7100 Connecticut Avenue, Chevy
Chase, Maryland 20815. National 4-H
Council is a not-for-profit educational
organization that utilizes private resources
to help expand and strengthen the 4-H
program. 4-H is the youth education
program of the Cooperative Extension
Service of the State Land-Grant
Universities and the U.S. Department of
Agriculture. Programs and educational
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Preface

This project is designed to introduce you to
the knowledge, skills and defensive driving
strategies a driver needs to survive. Actual
skills in operating a car cannot be learned in
this project. These kinds of skills can better be
learned through a high school driver education
class or commercial driving school, where you
can combine knowledge and understanding
with practice, under the supervision of a
professional driving instructor.
Introduction

There is more to driving than just knowing how to operate a car. Safe and efficient driving involves skill and knowledge. Knowledge of traffic rules, laws, regulations and procedures is probably the first step in preparing to drive. Practicing driving skills is next.

Driving is more complex than just learning how to start, stop and go.

The driving task involves continuous decision making. To become a safe and efficient driver, you must be able to recognize potential hazards and quickly decide how to avoid them. You must possess a high degree of skill not only in the maneuvering of a car but in signal recognition, judgement and decision making. Learn to drive defensively. Know what to do under a wide variety of conditions and situations.

Attitude is another important aspect of safe and efficient driving. Learn to be courteous on the highway. Do not take unnecessary chances. Use safety precautions. And remember, that drugs, alcohol and driving don't mix.
Traffic Lights, Signs and Symbols

Traffic laws may vary from state to state. If you are considering learning how to drive, you should obtain a current “rules of the road” booklet from your state. They are usually available from the agency that issues drivers licenses (i.e. Motor Vehicle Administration, Department of Transportation, Secretary of State, etc.).

Most states conform to the uniform vehicle code so that most laws concerning traffic signs and signals are the same from state to state.

The following chart summarizes traffic light control signals. They include red, green, yellow and white lights, in the form of lane signal symbols, pedestrian signals, traffic lights, arrows and flashing signals.

Traffic Lights control busy and hazardous intersections. Red means stop at the stop line or behind the crosswalk. Right turn on red is permitted, when safe, after stop and yield in some states. But watch for the NO TURN ON RED signs at some lights.

Yellow is a warning that the light is about to change from green to red. Driver may not enter intersection if he or she can stop.

Green means go, but first check for cars that may not stop. Yield to vehicles and pedestrians within the intersection.

Pedestrian Signals are mounted on the same post as the traffic light but below it.

Go. Leave the curb to cross the street.

Flashing. Do not leave curb, but if you have already started, complete crossing.

Stop. Do not leave the curb.

Flashing Signals are placed at hazardous intersections. A red flashing signal means exactly the same as a STOP sign. A STOP sign may also be posted at these intersections. A yellow flashing light signals CAUTION, tells you to slow down, look carefully and proceed with caution. Be ready to stop.

Arrows indicate direction.
Go straight ahead only, after yielding to vehicles and pedestrians within the intersection.
Go left only. Be sure to watch for oncoming traffic that may run the red light.
Go right only. Yield to pedestrians.
Stop. You may not go in this direction.

Warning. The green arrow is about to end.

Yield to pedestrians and vehicles already in the intersection, then go.

Lane Signals are often used on streets and expressways in and around cities to control the flow of traffic in lanes that change direction during different hours of the day.

Stop. You must never drive in a lane under a red X signal.

Warning. Your lane signal is about to change to red. Look carefully and prepare to leave the lane safely before the red X appears.

Go. You may drive in lanes underneath this signal, but you must also obey all other signs and signals.

Traffic Signs
Signs may inform motorists of laws, warn them of dangerous situations or guide them in following the correct route. Signs are usually divided into three groups: regulatory, warning, and information and guidance.

Sign Shapes Have Meaning

Octagon Stop
Round Railroad Crossing
Triangle Yield
Verticle Rectangle Regulatory
Pentagon School
Horizontal Rectangle Information and Guidance
Pennant No Passing
Diamond Warning

Sign Colors Give Meaning

Red Stop, Yield or Prohibited
White Regulatory
Orange Construction or Detour
Yellow General Warning
Green Expressway Interchange and Information
Black Regulatory
Blue Expressway Service Guidance
Brown Public Recreation and Scenic Guidance
Some Signs Give Messages Through Shape and Symbol

- Road Narrows
- Steep Hill Ahead
- No Bicycles
- Stop
- Yield
- No U Turn
- Camp Site
- Hospital
- First Aid
- Food & Gas
- No Left Turn

Other Regulatory Signs Give Messages Through Words and Symbols

- Do Not Enter
- One Way
- Wrong Way
- No Parking Anytime
- Pass With Care
- 2-Hour Parking

- No Hitch Hiking
- Walk on Left
- No Trucks Allowed

Warning Signs with Words and Symbols

1. Hazards
   - Deer Xing
   - Farm House

2. Reduction in width of road
   - Narrow Bridge
   - Road Narrows

3. Change in direction

4. Intersections
All diamond-shaped signs are warning signs.

The shapes and colors of signs have the same meaning everywhere in the U.S. Learning to recognize them is essential for safe driving.

**International Signs**

The United States has adopted some of the signs that are used in other parts of the world. Some of these include the following:

- **Stop**
- **Speed limit**
- **Yield**
- **Road narrows**
- **Falling rocks**
- **Railroad crossing**
- **Fuel station**
- **Expressway**

**Pavement Markings**

The following are various pavement markings that you need to recognize:

- **Two-lane, two-way roadway, passing permitted.**
- **Two-lane, two-way roadway, passing prohibited by cars to right of solid line.**
- **Two-lane, two-way roadway passing prohibited in both directions. Crossing centerline permitted only as part of left turn maneuver.**
- **Multi-lane, two-way roadway. Crossing centerline permitted only as part of left turn maneuver.**
Divided roadways, multi-lane with divider (median). Clear space in the median is available for emergency stopping off the travelled roadway.

Stop Lines are wide solid lines across a roadway to define where a vehicle must stop for pedestrians crossing the roadway.

Crosswalks are two parallel solid white lines across the roadway used by pedestrians for crossing. Crosswalks are usually, but not always, located at intersections. In certain areas, the space between the parallel lines may be hatched with diagonal white lines.

### You and the Driving Task

**Activity 1**

Study all road signs pictured in the previous pages. Note the shape, color and meaning of each sign. On the chart below, record the places where such a sign exists in your community or local area. If a sign does not exist in your area, indicate the place where you saw the sign while on a trip. Remember to record the date on which you observed each sign.

<table>
<thead>
<tr>
<th>Road Sign</th>
<th>Location</th>
<th>Date</th>
<th>Draw the Sign</th>
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</thead>
<tbody>
<tr>
<td>1. Bump</td>
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<tr>
<td>2. Camp Site</td>
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<td>3. Change in Direction</td>
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<tr>
<td>Road Sign</td>
<td>Location</td>
<td>Date</td>
<td>Draw the Sign</td>
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<tr>
<td>4. Deer Crossing</td>
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<tr>
<td>5. Do Not Enter</td>
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<td></td>
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<tr>
<td>6. Expressway</td>
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<td>7. Farm Machinery</td>
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<td>8. First Aid</td>
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<td>9. Food and Gas</td>
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<td>10. Hospital</td>
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<td>11. Intersection</td>
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<td>Road Sign</td>
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<tr>
<td>12. Narrow Bridge</td>
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<td>13. No Bicycles</td>
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<td>14. No Hitch Hiking</td>
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<tr>
<td>15. No Left Turn</td>
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<tr>
<td>16. No Parking Anytime</td>
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<td>17. No Trucks Allowed</td>
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<td>18. No U Turn</td>
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<td>19. One Way</td>
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<tr>
<td>Road Sign</td>
<td>Location</td>
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<tr>
<td>20. Pass With Care</td>
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<tr>
<td>21. Road Narrows</td>
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<tr>
<td>22. School Zone</td>
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<tr>
<td>23. Signal Ahead</td>
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<td>24. Slippery When Wet</td>
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<tr>
<td>25. Speed Limit</td>
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<tr>
<td>26. Steep Hill</td>
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<tr>
<td>27. Stop</td>
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</tbody>
</table>
28. Two-Hour Parking

29. Wrong Way

30. Yield

Activity 2

Sign shapes have meaning. Name the shape and give the meaning for each sign below:

<table>
<thead>
<tr>
<th>Sign</th>
<th>Shape</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Octagon" /></td>
<td><img src="image" alt="Octagon" /></td>
<td><img src="image" alt="Octagon" /></td>
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<td><img src="image" alt="Circle" /></td>
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<td><img src="image" alt="Triangle" /></td>
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<tr>
<td><img src="image" alt="Square" /></td>
<td><img src="image" alt="Square" /></td>
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</tbody>
</table>

Draw five different warning signs.
Activity 3

Obtain a driver’s handbook or rules of the road from your state drivers' licensing agency. Read and study the laws and rules. If study or test questions are provided, try to answer them correctly.

Activity 4

Answer the following questions.

1. What do the following traffic lights mean:
   - Red
   - Yellow
   - Green
   - Flashing Red
   - Flashing Yellow

2. What do arrows on road signs indicate? D ___ c ___ n

3. How do traffic controls and signs help drivers?
   They e u ___ e speed and direction of traffic; a ___ drivers of hazardous conditions;
   o ___ drivers of distances and services; and u i e drivers to their destinations by identifying routes.

Activity 5

Community awareness:

1. Find out if your state allows right turn on red. Why? Why not?
2. Check school crossing areas in your community. Are the pavements marked with a crosswalk? Are there pedestrian crossing signals?
3. What pedestrian signals are used at intersections in your town/city? Draw them.
4. Why do speed limits change when coming into a town/city?
5. Are special parking areas provided for the handicapped in your community? Draw the symbol for “handicap” and list three areas where special parking is provided in your community.
Most safety experts recognize four major steps that are necessary for safe driving ability. You must be able to:

1) **See** potential hazards. Observe what's happening around you.
2) **Think** ahead. **Predict** what is about to occur.
3) **Decide** what to do.
4) **Act** on your decision.

(A) **Seeing**
A common statement in accident reports is: "I looked both ways and then started across the street and the other car hit me. I didn't even see him coming."

Looking is often not enough when driving. You have to know where to look and what to look for. The following five practices are important to improving your seeing ability.

1. **Look ahead as you drive.** In city traffic you should look about one block ahead. On highways and expressways look at least 1/5 mile ahead. These distances should provide a safe margin of time for you to see and react to traffic situations correctly.

2. **Keep your eyes moving.** This means that you should use an orderly visual search pattern. Take selective glances continually near and far, to the right and left, in your mirrors and at the instrument panel. Always return your eyes to the straight-ahead position after each glance away from the roadway. Examples of this procedure:
   - Check rearview mirror. Look ahead at roadway.
   - Look to the right side of the road. Look ahead at roadway.
   - Check the speedometer and gauges. Look ahead at roadway.
   - Check left bodyside mirror for car passing. Look ahead at roadway.
   - Observe flashing lights or smoke in the distance. Look ahead at roadway.

Once you get in the habit of going through this pattern, you can adjust it for the driving environment you are in.

3. **Look for potential hazards.** This involves the mental process of putting the total traffic scene together so that you recognize potential hazards before they become accident situations. Learn to read and interpret traffic scenes correctly so that you can respond quickly.

4. **Make sure that others can see you.** When behind the wheel use your signal lights, horn, eye contact, body movements and car positioning to let other drivers and highway users know what you're planning to do.

5. **Look for an escape route.** This means that you should continually look for an open space to go in case a potential accident situation develops. This open space can be in front, back or on either side of you. The space in front of you can be controlled by keeping a safe distance between you and the car in front of you. A safe distance equals one car length for every 10 miles per hour or a two-second gap. An easy way to check for adequate following distance is to pick a point that the car ahead of you has just passed (rear bumper). This can be a sign, pavement mark or a clump of grass. Start counting by seconds (one thousand and one, one thousand and two). If your front bumper gets to the mark before two seconds, you are following too close. If you have at least two seconds, you will be following at a safe distance regardless of your speed. During bad weather conditions, allow more space between you and another vehicle.

Being able to see well does not insure that you will be able to detect all the critical hazards in traffic, nor will it enable you to take the proper action once the hazards are recognized. You need to develop a system for seeing, predicting and responding to traffic situations.

(B) **Predicting**
**Predicting** is the ability to know what is happening, what could happen, and what effect it will have on you if it does happen. There are three elements associated with traffic predictions. They are:

1. **Actions of other vehicles and road users.** Where are they going? What will they do? How much time do I have? What is the threat to me? Where will our paths cross?

2. **Control of your vehicle.** What are the capabilities of my car? Do I have enough time to brake, steer around or accelerate to avoid an accident situation?

3. **Driver options and consequences.** In most potential accident situations you have more than one option. Do I steer around, brake, blow my horn or speed up? What are the possible results of these options?

(C) **Deciding**
The decision step involves choosing one of the predicted actions to, hopefully, avoid a potential accident situation. Whatever the decision is, it must involve communication to other road users.
Drivers communicate their actions through use of the following: brake lights, turn signals, high and low beam headlights, emergency flasher lights and horn. Other communication can be obtained from direct eye contact or signaling with hands or head, as in looking to the side before turning.

(D) Acting
There are only four actions you can take to change a potential accident situation.

1. Acceleration. In some instances you can speed up and avoid an accident situation.

2. Braking. Slowing down and increasing the amount of space between you and another vehicle can be effective in helping to avoid a potential accident. The amount of braking may vary with the situation and with the road condition.

3. Steering. If a potential accident situation is seen early enough, steering to either side to avoid conflict is a good option, if space to the side is adequate.

4. Communicating. Letting other drivers and road users know the move you're about to make.

Activity 1
Practice what you have learned. The following activities are designed for practicing some of the visual elements of driving.

Looking Ahead as you Drive. Try looking ½ mile ahead. You can establish this distance by picking a point ahead of your car and counting off seconds (one thousand and one, one thousand and two, etc.) until your car reaches that point. If you count less than 12 seconds, you need to adjust your distance. A little practice with this technique will help you master the 12-second distance. While a passenger in your family car, observe how far ahead you scan the road. Start with ½ mile. Count in seconds, one thousand and one, etc., until your front bumper reaches that same point. Record three trials:

1 _______ seconds
2 _______ seconds
3 _______ seconds

Try a different distance using the same techniques. Record three trials:

1 _______ seconds
2 _______ seconds
3 _______ seconds

Activity 2
While on a short drive with a parent or friend, record the number of potential hazards you see along the way.

Hazard Hunt

| Date: ____________________________ |
| Trip Length: ____________________________ (miles/blocks) |
| Hazards on Left | Hazards on Right |
| TOTAL: | TOTAL: |

| Hazards Ahead |
| TOTAL: |
Driving Defensively

You can reduce your chances of having an accident by driving defensively. This simply means to expect the unexpected. Adjust your driving behavior to help reduce potential accident situations. Know your limitations and assume the limitations of others.

Recognize potential hazards. Look for signs of hazardous situations that may result or be a factor in contributing to an accident:
1. **Roadway features and conditions.** Hills, curves, intersections, lane width, bridges, guard rails, etc. Snow, standing water, observance of shoulder, pedestrians, bicycles, animals, parked cars, driveways, roadside stands, business entrances and exists. *Road surface - gravel, potholes.*

2. **Traffic controls.** Signs, signals, pavement markings. These are places where traffic patterns and situations will change. You must be able to recognize these controls and be able to recognize other drivers’ and users’ actions, such as bikers, pedestrians, small pets and wildlife, and drivers who might disobey traffic signs.

3. **Auto-related hazards.** Brake failure, tire blowouts, hood or trunk flies up, flying object breaks windshield, etc.

4. **Distractions in the car.** Flying or crawling insects, disorderly children, eating and drinking behind the wheel, movement of objects being transported, etc.

5. **Other drivers taking risks.** Speeding, passing on right, tailgating, cutting in too close when changing lanes, and pulling out into traffic at a very slow speed.

Defensive driving also involves some techniques and procedures other than those related to visual abilities. Other defensive moves to consider:
1. Reduce sun glare by wearing sunglasses and using the sun visor.
2. Clean windows inside and outside regularly.
3. Always clean all snow and ice from all windows before moving the car.
4. Use your headlights during dusk and dawn hours; not just the parking lights. Use your headlights regularly, too.
5. Dim headlights when meeting another car. Use low beams when driving in towns and cities. If a car is coming toward you with high beams, flick your high beams on then off quickly, if the car is far enough away to avoid blinding each other. If the driver continues to use high-beam lights, slow down and look to the right of the road, as a guide. Do not look directly at the bright lights, and by all means don’t get into a light flashing battle.
6. Don’t over drive your headlights. This means that you should be able to stop in the distance you can see with your headlights.

Always slow down during adverse weather conditions and use your headlights.
- In fog use your low-beam lights. They will allow you to see better than with the high beams.
- In heavy rain use your low-beam lights day or night. If you cannot see clearly, pull off to the side of the road.
- In a snow storm use low-beam lights during day or night. To stop, pump the brakes. Avoid hard braking actions. Jamming on your brakes will cause you to lose steering control. Slowing down gradually, well in advance using the engine and natural resistance, will reduce the need for braking, reducing the risk of locking brakes or losing steering control.
7. Keep brake lights in good working order. Cars behind you cannot tell when you are slowing down or stopping unless brake lights are working.

**Adverse Weather Driving Techniques**

**Rain:**
Water on a road can cause a condition called “hydroplaning.” The car tires are actually riding on a thin layer of water which reduces traction and steering ability. Cars can hydroplane at speeds of 30 MPH or more, depending on tire conditions. To avoid hydroplaning, reduce speed and drive with properly inflated tires having a good tread.

**Snow:**
Snow on the road reduces starting and stopping abilities. To maintain control use gentle actions when starting and stopping. If the drive wheels start to slip, release the gas pedal and start again. Use snow tires or chains. If you get stuck in snow, try freeing your car by rocking it forward and backward, using the following steps:
1. Turn the front wheels straight ahead.
2. Accelerate gently. Do not spin the wheels.
3. Shift to reverse and move backward the instant the car stops moving forward. Release the gas pedal and make sure the car is standing still before changing gears.
4. Continue this back-and-forth movement until the car has made enough tracks to get out of the snow.

**Ice:**
Watch for patches of ice on roads and bridges, etc. In an area clear of traffic, check for ice conditions by pumping the brake lightly and then release. If you can feel the car pulling or sliding, ice may be present. (Only try this test while driving at a slow speed.)

**Fog:**
Fog reduces visibility, therefore, speed must be reduced. In any fog, day or night, drivers should use low-beam headlights, because low beams reflect the light downward to the road surface. Reduce speed and leave lots of space between you and another car, because it’s hard to judge distances accurately with changing intensities of fog.

**Handling Emergency Situations**
Every driver sooner or later will be faced with an emergency situation. Knowing what to do is the first step in correcting the situation.

The following are some tips on handling various emergencies:

**Skidding**
Skidding can happen on dry roads as well as wet or icy roads. It’s usually caused by too much speed, too much braking or too much steering. Often, sudden changes in direction can cause a skid.
To correct a skid:
- Stay off brakes
- Ease up on the gas
- Steer in the direction you want the front of the vehicle to go.
- Apply brakes gently, if needed, to slow the vehicle.

These corrective actions should be used for both front-wheel-drive and rear-wheel-drive cars.

**Tire Blowout**
The following steps should be used when a tire suddenly goes flat:
1. Grip the steering wheel firmly and keep the car in your lane.
2. Release the gas. Don’t brake!
3. Turn on emergency flashers.
4. Drive slowly off the road. If you don’t have the room to pull off the road, drive slowly until you do. You may ruin a tire but you may also avoid an accident.

**Brake Failure**
Brake failure can be serious business. Total brake failure rarely happens, but if it occurs, a safe procedure to follow will vary depending on the situation you encounter while driving. The amount of time you have to react is critical to properly handling this emergency situation.

**Situation 1. Little time before hitting something.**
1. Pump the brake pedal quickly and with short strokes.
2. If there is little slowing of the vehicle from step 1, reach for the hand-operated parking brake. Pull the handle back while holding the release button or lever to allow you to quickly release the handle if the car begins to skid out of control. Foot-operated parking brakes should be used as a last resort, because they have a tendency to cause the rear wheels to lock, resulting in a possible loss of vehicle control.
3. If necessary, steer onto a soft shoulder or into the bushes. Release the parking brake, if you are able to, before steering around the obstruction, then reapply the parking brake after the immediate danger has passed.

**Situation 2. Adequate time with no immediate danger of hitting something.**
1. Pump the brake pedal quickly and with short strokes.
2. If there is little slowing of the vehicle from step 1, downshift to the next lowest gear until you have reached the lowest gear possible.
3. Use your directional signals or flashers to warn other drivers of your intentions.
4. Pull to the side of the road and apply the parking brake as the vehicle slows.

**Situation 3. Brake failure while descending a long or steep hill.**
1. Pump the brake pedal quickly and with short strokes.
2. If there is little slowing of the vehicle from step 1, downshift to the next lowest gear, then proceed as time permits to downshift to the lowest gear.

3. If there is little slowing of the vehicle from step 2, reach for the hand-operated parking brake. Pull the handle back while holding the release button or lever to allow you to quickly release the handle if the car begins to skid out of control. Foot-operated parking brakes should be used as a last resort, because they have a tendency to cause the rear wheels to lock, resulting in a possible loss of vehicle control.
4. If the parking brake malfunctions or is improperly adjusted so as to prevent adequate braking, there are two possible ways to stop the vehicle:
   a. Leave the car in gear and turn off the ignition switch. Shutting down the engine will generally slow the vehicle. Vehicles with power steering become difficult to steer when the engine is off.
   b. Steer off the road and head up a grade or into bushes.

**Stuck Accelerator**
Sometimes the gas pedal will stick or a spring will break which will cause the car to speed excessively. Use the following steps to handle this emergency:
1. Disengage the clutch on a manual transmission or shift an automatic transmission to neutral.
2. Use directional signals and pull off the roadway.
3. Turn off the ignition.

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**Activity**

Describe how you would handle the following emergencies. Feel free to get advice from your parents or other drivers. Then check resource materials at the library to see if you responded correctly. Information may also be available from your local Dept. of Transportation or from school and commercial driver education classes.

1. **Steps to changing a flat tire (describe).**

2. **List steps to take if vision is suddenly blocked (hood flies up, etc.).**

3. **List steps to take if the car catches on fire.**
4. List the steps to take if your car stalls on a railroad track.

5. Tell how to escape a car sinking in deep water.

6. Describe how to return to pavement if a wheel runs off the road.

Activity 2

Tire blowouts, brake failure and a stuck accelerator are emergencies that can happen at any time during any season. Make sure that you know how to respond to each of these situations. List the steps to be taken here:

<table>
<thead>
<tr>
<th>Tire Blowout</th>
<th>Brake Failure</th>
<th>Stuck Accelerator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Doing a little planning before you take a trip can mean the difference between joy and sheer frustration. When you are considering a trip, regardless of distance, there are some common rules to follow. They include:

1. **Prepare your car in advance.** If it needs maintenance, do it or have it done well before your departure. This will give you time to see if the car is working properly.

2. **Carry basic emergency equipment, such as:**
   - Fire extinguisher
   - Flashlight, adjustable wrench, screwdriver and pliers, engine oil, coolant, windshield washer fluid, spare fuses (all sizes) and a first-aid kit.

3. **Allow enough time for your trip.**
   - The old saying “haste makes waste” applies here. Allow for extra delays that you may encounter.

4. **Consult weather and traffic reports and choose the best travel time.** Avoid bad weather and rush hour traffic jams, if possible.

5. **Plan your route ahead of time so that you will know the names of streets, highways, etc.** Passengers can help you when you are trying to find a house or street number. Don’t get so preoccupied with looking that you become unaware of where you are driving.

   Rules one and two should be observed at all times, whether travelling around town or taking long trips.

**Long Trip Preparation**

Vacations and longer trips need even more preparation in addition to the above checks. Here are some tips:

1. Make sure that the driver(s) is well rested before the trip.
2. **Carry with you:**
   - Maps, atlas or travel guide
   - Change for tolls and telephone calls
   - Spare set of keys
   - Telephone numbers for motor club members
   - Travelers checks and credit cards for major expenses

3. **If you plan to travel during winter months, take these along with you:**
   - Chains or snow tires
   - Battery jumper cables
   - Window ice scraper and snow brush
   - Tow line or safety chain
   - Portable radio
   - Blanket and heavy clothing
   - Snow shovel
   - Food

4. **When loading your car for the trip:**
   - Place the heaviest objects on the bottom of the trunk.
   - Avoid carrying heavy objects on top of car so you don’t become “top heavy.”
   - Keep the rear view clear. Don’t place objects in rear window (in a sudden stop they become projectile).
   - Place the fire extinguisher where it can be easily reached.
   - **DO NOT carry a spare can of gas.**
   - Add more air to tires to compensate for extra weight, if needed. (Remember to drive slowly over bumps or rough road areas to prevent tire and wheel damage.)

5. **Stop mail, newspaper or other deliveries. Let a neighbor know where you can be reached.**
   
   Arrange for night lights to be turned on in your home.

**Map Reading**

(See map next page)

Everyone will need to use a road map sometime during their driving experience. Being able to read and use a map is essential to all drivers, regardless of experience. All good maps have similar features that you should know something about.

The legend explains the symbols and markings used. It also includes a mileage and distance scale, an index of towns and cities, a large scale city map, park rest stops and other points of interest.

**How to use the city and town index.**

Look at the list of towns and cities arranged in alphabetical order. Find the name of the city you wish to locate, such as New Orleans. Note the letter and number after the name, such as J-6. These letters and numbers correspond to those found around the edge of the map. By placing one finger on the J in the margin and the other on 6 and following these lines until your fingers meet, you will find the approximate spot where New Orleans is located. If you have trouble tracing a straight line with your fingers, take a ruler and pencil and draw two lines. The city you’re trying to locate should be near the point where the two lines intersect.

**Finding distance on a map.** Use the scale on the legend. It will indicate how many miles equals an inch. You can then measure the distance along specific roads from point to point and then multiply the number of miles to an inch by the number of inches. This will give you the approximate number of miles.

Maps also have small numbers along specific roads between various points. You can add these numbers along your route from point to point and come up with the correct mileage.
Activity 1

Using the map on the previous page, try to locate these cities: Memphis, Tennessee; Little Rock, Arkansas; Texarkana, Texas; and Jackson, Mississippi.

Activity 2

Locate a map of your state. Find your town/city and record the name and location. Select three other towns or cities that you would like to visit in your state. List them and their location codes. Calculate the distance from your home to each city. Map out the shortest route from home to each town/city. Name all major highway routes that you would use to get there.

<table>
<thead>
<tr>
<th>Home Town/City</th>
<th>Mileage</th>
<th>Write out the shortest route from your home to each town/city. Be sure to identify highway numbers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Code:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Code:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Code:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Code:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Alcohol and Drugs

There is no question that alcohol contributes to at least 50% of our highway fatalities. That's why there is so much concern regarding alcohol consumption and driving. Alcohol greatly affects a driver's vision, judgement, coordination and reaction time. Approximately 60% of alcohol-related deaths involve persons between the ages of 16 and 24.

Beer is the type of alcohol most used by teenagers. Many people think that beer has less alcohol than mixed drinks or wine, but the truth of the matter is that a can of beer has the same amount of alcohol as does a glass of wine or a shot of whiskey. There are many myths associated with alcohol. Here are a few along with the facts.

<table>
<thead>
<tr>
<th>The Myths</th>
<th>The Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's a stimulant</td>
<td>It's a depressant</td>
</tr>
<tr>
<td>It has nutrients</td>
<td>It has calories</td>
</tr>
<tr>
<td>It increases mental and physical ability</td>
<td>It decreases mental and physical ability</td>
</tr>
<tr>
<td>In given amounts, alcohol affects everybody the same way</td>
<td>In given amounts, alcohol affects individuals differently</td>
</tr>
<tr>
<td>There are ways to sober up quickly</td>
<td>Time is the only way to sober up</td>
</tr>
<tr>
<td>Any amount will cause bodily damage</td>
<td>Excessive amounts will cause bodily damage, in time</td>
</tr>
</tbody>
</table>

Factors that Influence the Effects of Alcohol on the Body

1. Body size and weight
2. Amount and kind of food in the stomach
3. Amount of alcohol consumed
4. Number of drinks consumed per hour
5. Strength of drinks consumed
6. Drinking experience/tolerance
7. Fatigue
8. Emotional state (mood)

Here are some ways to help control alcohol intake or the effects of alcohol:

1. Eat some food before or while drinking. Food in the body helps to slow down the absorption of alcohol.
2. Space drinks about one hour apart.
3. Drink a beverage other than alcohol.
4. Don't accept drinks you really don't want.
5. Don't empty your glass between drinks unless you really want another drink; empty glasses invite a refill.

The amount of alcohol that gets into the bloodstream determines the amount of intoxication. This is commonly referred to as Blood Alcohol Concentration (BAC). Police use BAC to determine possible drunk drivers. The BAC is usually expressed in hundredths of a percent (.00%). The legal BAC varies in some states.
The following chart shows the number of drinks consumed in one hour and how that alcohol would affect the average person in one hour’s time. The BAC is based upon standard servings of beer, wine or liquor.

<table>
<thead>
<tr>
<th>Number of drinks in one hour</th>
<th>BAC</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 serving of beer, wine or liquor</td>
<td>.01-.02%</td>
<td>After one drink, inhibitions are lessened. Person may be less critical of oneself and others, judgement and reasoning begin to be affected.</td>
</tr>
<tr>
<td>3 servings of beer, wine or liquor</td>
<td>.05-.06%</td>
<td>After three drinks, judgement is not sound. Person will not think clearly, reasoning is less reliable. Person may do or say things that are rude and unreasonable.</td>
</tr>
<tr>
<td>4 servings of beer, wine or liquor</td>
<td>.08-.09%</td>
<td>After four drinks, hearing, speech, vision and balance are affected.</td>
</tr>
<tr>
<td>5 servings of beer, wine or liquor</td>
<td>.10-.11%</td>
<td>After five drinks, most of a person's behaviors are affected. Body parts seem to &quot;not work together.&quot; Performing any task using hands and feet is difficult. Walking without stumbling is difficult.</td>
</tr>
</tbody>
</table>

Alcohol and Time

The following chart illustrates how long it takes to reduce a person's BAC.

- Wine
- Beer
- Liquor

Each drink contains approximately the same amount of alcohol.
Driving and "Implied Consent Laws"

All states have "implied consent laws." This means that when a person applies for a driver's license, he or she automatically gives consent to be tested for BAC if arrested on suspicion of driving under the influence of alcohol. If drivers refuse to take the test, their license can be suspended even if they are not convicted.

Your driver's license is a precious commodity. You can't afford to lose it by drinking and driving. The decision to drink or not to drink while driving is yours and yours only. Violations are punishable by law. Think about the consequences!

Drugs and Driving

Just about any drug can reduce a person's driving ability. Not just illegal drugs! Prescription and non-prescription household-type medicines cause problems, too. Due to widespread advertising and the fact that we use these medications daily to ease our aches and pains, few people consider them a problem or know their potential danger. Yet many cough syrups, drops, sprays, pills and tablets taken for headaches, colds, sinus, hay fever, allergies or nervous conditions may cause drowsiness and dizziness. Misuse of these drugs can be equally or more dangerous than illegal drugs when driving, because the side effects are unexpected and multiplied when used in combination with alcohol.

Sometimes when two different drugs are taken together, their side effects are also multiplied. Driver alertness decreases without warning.

Common side effects include blurred vision, slowed reaction time, faulty judgement and impaired depth perception, all of which reduce the ability to drive safely. Read the label before taking any drug or medicine.

Note specific warnings about drowsiness or dizziness that could affect driving ability.

Illegal drugs are just that, I-L-L-E-G-A-L! They come in many forms and can have "very negative" effects on the body. There are stimulants, depressants, hallucinogens, tranquilizers, anti-histamines and narcotics. Each affect the body differently. You will learn more about these when completing Activity #4.

Remember, no drug is harmless! Whether prescription, non-prescription or illegal, any drug taken without or contrary to medical supervision is very risky. You don't know how they will affect your body under certain conditions.

Activity

List the laws that apply to drunk driving in your state. Indicate the BAC level for being legally drunk. Indicate all components of the law, such as open containers in cars, etc. (Use a separate sheet of paper, if necessary.) Write a report or give a speech for your club or class.

Activity 2

Collect articles from newspapers concerning traffic accidents and collisions for a two-week period of time. Calculate the percentage of articles which indicate that alcohol may have been involved. Record number of articles _______; Number of alcohol-related accidents _______; Percentage _______.
Activity 3

How would you respond to each driving situation?

A. You went to a party with five friends in one car. The driver drank much too much. He insists on driving you and the others home. After all, it is his car. How will you deal with this situation?

B. You’re only six blocks from home. A policeman that has been trailing you stops you on suspicion of drinking while intoxicated and asks you to take a breath test. You finished your last drink 45 minutes ago. How would you respond to this request?

Activity 4

There are prescription and non-prescription drugs other than alcohol that can affect driving. Find out how each kind of drug affects the body. List one way each drug could affect driving behavior. What names are commonly applied to these drugs in your local area? Name some common household drugs/medicines. (Use a separate sheet of paper, if necessary.) Prepare a report or speech for your club or class.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Effect on the body/driving</th>
<th>Names commonly used</th>
<th>Household drugs/medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tranquilizers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hallucinogens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcotics</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Stimulants</td>
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<td></td>
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</tr>
</tbody>
</table>
Most safety experts agree that the use of safety belts could reduce highway deaths by 60%. This fact is supported by car manufacturers offering a $10,000 life insurance policy if you are killed wearing a safety belt in one of their new cars. They make these offers because they know the chances of a person wearing a safety belt getting killed are greatly reduced. Many myths and reasons for not wearing safety belts are often given by car users. The following chart summarizes some of the myths and facts about safety belts. Do any fit you?

Wearing safety belts must become a habit. It's a habit that could save your life.

<table>
<thead>
<tr>
<th>Myth</th>
<th>Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I don't need safety belts because I'm a really good driver. I have excellent reactions.&quot;</td>
<td>&quot;No matter how good a driver you are, you can't control the other car. When another car comes at you, it may be the result of mechanical failure and there's no way to protect yourself against someone else's poor judgement and bad driving.&quot;</td>
</tr>
</tbody>
</table>
| "I don't want to be trapped in by a safety belt; better to be thrown free in an accident!" | "Being thrown free is 25 times more dangerous. 25 times more lethal. If you're wearing your belt you're far more likely to be conscious after an accident...to free yourself and help your passengers. Safety belts can keep you from • plunging through the windshield • being thrown out the door and hurtled through the air • scraping along the ground • being crushed by your own car. In almost any collision, you're better off being held inside the car by safety belts."
| "If I wear a safety belt, I might be trapped in a burning or submerged car!" | "Less than one-half of one percent of all injury-producing collisions involve fire or submersion. But if fire or submersion does occur, wearing a safety belt can save your life. If you're involved in a crash without your safety belt, you might be stunned or knocked unconscious by striking the interior of the car. Then your chances of getting out of a burning or submerged car would be far less. You're better off wearing a safety belt at all times in a car. With safety belts, you're more likely to be unhurt, alert, and capable of escaping quickly." |
| "I don't need it. In case of an accident, I can brace myself with my hands." | "I just don't believe it will ever happen to me." |
| "Most people would be offended if I asked them to put on a seat belt in my car." | "I can touch my head to the dashboard when I'm wearing my seat belt so there's no way it can help me in a car accident." |
| "At 35 miles per hour, the force of impact on you and your passengers is brutal. There's no way your arms and legs can brace you against that kind of collision. The speed and force are just too great. The force of impact at just 10 MPH is equivalent to the force of catching a 200-pound bag of cement from a first story window." | "Well, I only need to wear them when I have to go on long trips, or at high speeds." |
| "Polls show that the overwhelming majority of passengers would even willingly put their own belts on if only you, the driver, would ask them." | "Everyone of us can expect to be in a crash once every ten years. For one out of 20 of us, it'll be a serious crash. For one out of every 60 children born today, it will be fatal." |
| "Eighty percent of deaths and serious injuries occur in cars traveling under 40 miles per hour and 75 percent of deaths or injuries occur less than 25 miles from your home." | "Safety belts were designed to allow you to move freely in your car. They were also designed with a latching device that locks the safety belt in place if your car should come to a sudden halt. This latching device keeps you from hitting the inside of the car or being ejected. It's there when you need it." |
Activity 1

Survey your friends and relatives to find out how often they use their safety belts while in a car. Obtain the following information:

<table>
<thead>
<tr>
<th>Safety Belt Use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>_______ Always</td>
<td></td>
</tr>
<tr>
<td>_______ Most of the time</td>
<td></td>
</tr>
<tr>
<td>_______ Seldom</td>
<td></td>
</tr>
<tr>
<td>_______ Only on long trips</td>
<td></td>
</tr>
<tr>
<td>_______ Never</td>
<td></td>
</tr>
</tbody>
</table>

Number Surveyed _______

Activity 2

Practice using your safety belt for one month. Keep a record of the number of trips _______ and the number of times you used the belt _______. Calculate the percentage _______%.