Expressways
Entering/Changing Lanes/and Exiting

1. The three parts of an expressway entrance are:
   1. _____Access_____
   2. _____Acceleration_____________
   3. _____Merge_____________

2. Mark each of the above areas on the diagram below.

3. List two things you should search for when approaching an expressway ramp.
   1. _____Entrance number, direction & other destination information_____
   2. _____Signs indicating “WRONG WAY” or “DO NOT ENTER”_____

4. The purpose of the acceleration lane is to ___accelerate___ to ___speed of traffic___.

5. You should NOT do which of the following when merging onto the expressway.
   - Search for conflicts
   - Stop
   - Be prepare to drive onto shoulder if necessary
   - Create space around your vehicle

6. Give four reasons to change lanes on an expressway.
   1. ____to allow another driver to merge onto the expressway____
   2. ____to pass_____________________________
   3. ____when the lane ahead blocked____________________
   4. ____when following large vehicles that block your vision____
7. Describe the intended use for each expressway lane.

Entrance/Exit — traffic enters or exits the expressway

Right Lane — traffic entering or exiting and slower traffic

Middle Lane — long distance driving

Left Lane — passing and faster traffic

8. On the diagram below,
   • name and mark the two parts of an expressway exit.
   • indicate when the driver should begin to reduce speed.

9. The diagram below is a __weave__ lane in which traffic exiting and entering the expressway use the same ramp.

10. Is the exiting or entering traffic required to yield on the ramp above?
    The traffic entering the expressway is required to yield to the traffic already on the expressway.
High Speed Considerations

1. If you need to change direction on an expressway, you must ___ exit at the next available exit and re-enter again going in the correct direction ___.

2. If you miss your exit, you should ___ continue to the next exit ___.

3. Where are U-turns allowed on expressways? 
   no where

4. Describe “pack driving”?  
   When vehicles “bunch up” on the expressway.
   • Why is it dangerous?  
   Pack driving robs the drivers of a space cushion.

5. Why do many expressway crashes result in chain-reaction collisions? 
   Many expressway crashes result in chain reaction collisions because drivers do not establish enough space around their vehicles to allow for escape routes.

6. Explain highway hypnosis? 
   Highway hypnosis is a dulled, drowsy condition experienced by some drivers because expressway driving often becomes monotonous.

7. What steps can a driver take to combat highway hypnosis? 
   The driver should plan regular breaks at rest stops and switch drivers often if possible.

8. Describe “ramp metering” and why it is used.  
   Ramp metering is the use of sensors and lights that allow only one vehicle to enter the roadway at a time. It is used to control the number and spacing of vehicles on the expressway.
9. How does driving on the expressway in urban areas differ from driving on the expressway in rural areas?

The volume of traffic is usually greater in urban areas. Often the speed of traffic will reduce to a crawl during peak driving hours. Drivers should try to avoid the right lane unless exiting the expressway.

10. When traveling on the expressway, why is it important to know exit numbers before you begin the trip?

It is important to position for an exit at least ½ mile before the exit. Since exit numbers correspond to mile marker numbers, knowing the exit number in advance will allow you to position for the exit as needed.

You can determine if an exit is on the right or left by the position of the exit number. Ex: This is a right exit because Exit 45A is positioned on the right side of the sign. Exit numbers in Virginia also correspond with the mile marker numbers.

11. When changing lanes from the right lane to the middle lane on an expressway, what two flows of traffic must you check and why?

You must check the traffic in the middle lane and the traffic in the left lane as the driver in the left lane may be getting ready to execute a right lane change into the same space you plan to enter.
Introduction to Alcohol

1. List 5 reasons why people choose to drink alcohol.
   1. __peer pressure______________________
   2. ____parents use alcohol________
   3. ___our culture accepts drinking________
   4. ____to seek relief from anxiety & frustrations
   5. ___to have a good time________________

2. At what age is drinking and driving legal? __never__

3. Fill in the chart below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Short term Rewards</th>
<th>Long term Rewards</th>
<th>Short term Consequences</th>
<th>Long term Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riding with a drinking driver</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving after using alcohol or drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Students will complete this either individually or in groups to be used for class discussion)
Nature of Alcohol Related Crashes

1. Why are statistics for drug-related motor vehicle crashes often unavailable?

Statistics for drug-related motor vehicle crashes are often not available because of the lack of comprehensive and uniform testing and standardized impairment levels.

2. Fill in the chart below: (Based on 2007 statistics)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total number of crashes in Virginia =</td>
<td>146,405</td>
</tr>
<tr>
<td>B. Total number of alcohol related crashes in Virginia =</td>
<td>11,215</td>
</tr>
<tr>
<td>C. Percentage of alcohol related crashes in Virginia =</td>
<td>7.7</td>
</tr>
<tr>
<td>D. Number of drivers under the legal drinking age involved in alcohol-related crashes =</td>
<td>1255</td>
</tr>
<tr>
<td>E. Total number of drivers involved in alcohol related crashes =</td>
<td>11,251</td>
</tr>
<tr>
<td>F. Percentage of alcohol related crashes involved in underage drinking drivers =</td>
<td>11</td>
</tr>
<tr>
<td>G. Total number of licensed drivers in Virginia younger than 21 =</td>
<td>332,000</td>
</tr>
<tr>
<td>H. Total number of licensed drivers in Virginia =</td>
<td>5,436,825</td>
</tr>
<tr>
<td>I. Percentage of licensed drivers in Virginia younger than 21 =</td>
<td>6</td>
</tr>
<tr>
<td>J. Licensed drivers younger than 21 are over represented in alcohol related crashes by</td>
<td>5%</td>
</tr>
</tbody>
</table>

3. List two reasons licensed drivers younger than 21 years old are over represented in alcohol related crashes.

- Inexperienced at driving
- Inexperienced at drinking
BAC FACTORS

1. Define BAC.

_Blood Alcohol Concentration is the percentage of alcohol related to the total amount of blood in the body. For example, one drop of alcohol per 999 drops of blood equals a .10 BAC._

3. List six factors which affect an individual’s BAC.

- **Body weight**
- **Time spent drinking alcohol**
- **Gender**
- **Food consumed prior to and while drinking**
- **Alcohol content of the drink**
- **Size of the drink consumed**

3. An alcoholic beverage which is 100 proof is _50_ % alcohol.

4. Determine the total alcohol content of the following:

<table>
<thead>
<tr>
<th>Drink Size</th>
<th>Drink</th>
<th>Alcohol Content</th>
<th>Total Alcohol Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 oz</td>
<td>Beer</td>
<td>.045</td>
<td>.54 oz</td>
</tr>
<tr>
<td>12 oz</td>
<td>Beer</td>
<td>.052</td>
<td>.64 oz</td>
</tr>
<tr>
<td>12 oz</td>
<td>Light Beer</td>
<td>.035</td>
<td>.42 oz</td>
</tr>
<tr>
<td>16 oz</td>
<td>Beer</td>
<td>.045</td>
<td>.72 oz</td>
</tr>
<tr>
<td>1 oz</td>
<td>Whiskey</td>
<td>80° (.40)</td>
<td>.40 oz</td>
</tr>
<tr>
<td>1.5 oz</td>
<td>Whiskey</td>
<td>80°</td>
<td>.60 oz</td>
</tr>
<tr>
<td>5 oz</td>
<td>Wine</td>
<td>.12</td>
<td>.60 oz</td>
</tr>
<tr>
<td>12 oz</td>
<td>Malt Liquor</td>
<td>.077</td>
<td>.84 oz</td>
</tr>
<tr>
<td>12 oz</td>
<td>Cooler</td>
<td>.051</td>
<td>.61 oz</td>
</tr>
</tbody>
</table>
5. Are all alcoholic drinks the same?

No

6. What factors are responsible for the differences in alcohol content in various drinks?

Size of the drink
Percentage of alcohol in drink

7. Refer to slides T-7.8 and T-7.9.
   a. A 200 lb. male who registered a BAC of .03 has probably consumed _22_ ounces of light beer within an hour.
   b. A 200 lb. female who registered a BAC of .03 has probably consumed _18_ ounces of light beer within an hour.
   c. A 150 lb. male who registered a BAC of .03 has probably consumed _17_ ounces of light beer within an hour.
   d. A 150 lb. female who registered a BAC of .03 has probably consumed _13_ ounces of light beer within an hour.

8. Explain why there is a difference in the amount of alcohol needed for a male or female of the same weight to reach a .03 BAC.

   Women do not metabolize alcohol as well as men due to limited production of the breakdown enzyme alcohol dehydrogenase that breaks alcohol down.

9. Explain the differences in the amount of alcohol needed for a 150 lb. male and a 200 lb. male to reach a .03 BAC.

   Larger persons have more blood and other fluids than smaller persons. Since BAC is a mathematical ratio of alcohol to body fluids, it takes more alcohol to reach the same alcohol concentration in a larger person.

10. How does the amount of food in the stomach affect the absorption of alcohol?

    Food coats the lining of the stomach and slows down the absorption of alcohol into the blood stream. However, the alcohol will eventually reach the blood stream.

11. Most alcohol is eliminated from the body through _oxidation in the liver_.

12. The BAC elimination rate is approximately _0.015_ per hour.

13. If a person has a BAC of .045 at 9 o'clock, when will he/she reach a zero BAC?

    Around 12 o'clock – It will take the body 3 hours to reduce the BAC .045 (.015 x 3 = .045)