1. Drugs often mimic the action of chemical messengers called neurotransmitters within the brain.
2. Why are teenagers more likely to become addicted to a substance than adults? The teenage brain is not fully developed.
3. Label the following areas of the brain: cerebrum, cerebellum, midbrain, medulla, & pons.

What does the acronym BAC stand for? **Blood Alcohol Concentration**

4. A 160 lb female who consumes 4 drinks in 3 hours will have a BAC **higher** than a male of the same size who consumes the same amount.

<table>
<thead>
<tr>
<th>BAC CHART FOR MEN</th>
<th>DRINKS</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
<th>180</th>
<th>200</th>
<th>220</th>
<th>240</th>
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</tbody>
</table>

Source: The Virginia Tech Alcohol Abuse Prevention

5. Subtract .01% for each 40 minutes of drinking.

<table>
<thead>
<tr>
<th>Time Factor Table</th>
<th>Hours Since First Drink:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td>0.015</td>
<td>0.030</td>
<td>0.045</td>
<td>0.060</td>
<td>0.075</td>
<td>0.090</td>
<td>0.105</td>
<td>0.120</td>
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</tbody>
</table>

If a 180 lb male consumes 7 drinks, will he be legal to drive in Georgia after 4 hours? Show your work and explain your answer.

\[ \text{BAC} = 0.15 - 0.060 = 0.09 \]

6. Schedule I drugs have the greatest potential for abuse and no medical use whereas the schedule V drugs are considered safe and medically useful.

7. Drug tests that are color tests are considered to be **presumptive**. What do these tests tell us?
8. Classify the following drugs according to their type:
   a. Marijuana   Hallucinogen
   b. Alcohol
   c. Cocaine   Stimulant
   d. Marijuana
   e. Heroin   Narcotic

9. How much of the evidence sent to the crime lab is drug-related? 75%

10. List two confirmatory tests for drugs:
    - Chromatography
    - Spectrophotometry

11. Give two examples of "club drugs"
    - Ecstasy
    - GHB

12. Give one example of a toxin:
    - Botulinum (poisoning of the peach)

13. Give three examples of earliest poisoning uses/cases:
    - Poisoned arrows
    - Inheritance powder

14. The deposits of poisons seen in fingernails are called:
    - Meese lines

15. What would an LD50 of 80 mg/kg indicate about a poison?
    - Substance is moderately toxic

16. At what BAC is alcohol considered to be lethal? 0.40

17. Most poisons are categorized as strong ______ or ______

18. Categorize the poisoning from the following substances based on the exposure level:
    a. Carbon monoxide  Acute
    b. Salmonella Chronic
    c. Dimethymercury  Chronic
    d. Polonium-210 Sub-acute

19. Explain the job of a "food taster". A person whose job it is to taste the food of another person to make sure it hasn't been poisoned.

20. What is the relationship of the FDA, EPA, DOT, & OSHA to toxicology?
    These are all federal agencies that investigate poisoning issues in foods, environment, businesses, and transportation.

21. In the event of a suspicious death, what are 3 body fluids that toxicology testing may be conducted on?
    - Urine
    - Blood
    - Vitreous (eye) fluid

22. Other than body fluids, what other two body tissues may carry evidence of poisoning?
    - Hair
    - Fingernails

Which web was created by a spider under the influence of:

   Morphine   E
   Sleeping pills  B
   Amphetamines  C
   Caffeine   F
   Marijuana   A
   NO DRUGS    D