

**Directions:** Read the scenarios & explain the area of the brain &/or nervous system affected. Fold the right side of the paper over to about ¼ to ½ of the page and write out the # of the question and the answer. Use this to quiz yourself.

SCENARIO
1. After a concert at Toyota Center in downtown Houston, you suddenly feel the metal barrel of a pistol pressed against your head from behind. "Don't move a muscle while I slip your wallet out of your pocket."
2. "Little Timmy" was extremely short for his age. His doctors concluded his brain was not stimulating the proper release of hormones necessary for growth. What area of the brain are they probably focusing on?
3. You're in a parking lot at 2 AM when a guy in a hockey mask holding a long-bladed knife jumps out at you. What system in your brain would arouse your body to action?
4. On Justin's 21 <sup>st</sup> birthday, police stopped his car. Justin's speech was slurred, he couldn't walk a straight line. The impaired functioning of what part of Justin's brain is responsible for these difficulties with motor coordination & balance?
5. Uncle Ed suffered a stroke which damaged a portion of his cortex. He shows some weakness and partial paralysis of his right leg. What area of his cortex was affected by the stroke?
6. Paul suffered from encephalitis (a brain infection) while in college. He recovered, but lost his ability to store new long-term memories. What part of the brain did the encephalitis damage?
7. Leon's car was broadsided by a truck causing Leon's head to smash against the driver's side window damaging his temporal lobe. What ability may be affected?
8. Jose suffered serious injuries when his car crashed but he was still able to crawl out of the car and pull his sister out as well. Name one of the transmitters that helped him function in this situation and tell how.
9. Lindsey is hooked on cocaine. What neurotransmitter seems most related to the pleasure such drugs produce & their addictive qualities?
10. Grandma Beth had a stroke which impaired her ability to speak fluently although she can move all the necessary muscles. What is the most likely location of her brain damage?
11. Kim's brain has a congenital anomaly (difference in brain anatomy when born), it lacks the main connection between the right & left hemispheres. What was Kim born without?
12. Sara's grandfather has developed Alzheimer's disease. What can you tell her about probable changes in his brain chemistry?
13. You're taking a shortcut through a back yard & encounter 2 pit bulls who begin pursuit. You run faster than you have ever run before, & escape, barely. It takes 10 minutes for your pulse & breathing to slow down to normal. What part of the nervous system slows heart rate?
14. On Monday Amy's vision got blurry & then she could no longer see at all. On Tuesday she found she couldn't hear. On Wednesday her sense of taste went. On Thursday she lost her sense of touch. Her CAT scan revealed a single brain tumor was probably producing all of these deficits. What single part of the brain is involved in all of these sensory processes?
15. Bishop Fred Pickering was struck by lightning when he insisted on finishing his 18 holes of golf despite the lightening packed thunderstorm. As he tried to land the final putt of the "Best game of his life!" the bolt of lightening struck the rear of his head, frying his occipital lobes. What aspect of behavior is likely to be impaired if the good Bishop survives?
16. Karen is taking Prozac to help control her depression. Prozac works by increasing the availability of what neurotransmitter?
17. Andrew suffered damage to part of the surface of his brain after suffering a massive football collision. As a result Andrew has lost some sensory awareness of his left leg. Where is Andrew's brain damage?
18. After falling through the ice on a local pond Sidney was trapped under the icy water for 10 minutes before the rescuers got him out. They were able to resuscitate his pulse and breathing but he did not regain consciousness for days. Disturbance of what specific part of Sidney's brain might have resulted in an inability of the brain to regulate normal alertness?
19. Juanita suffers from focal epilepsy (seizures localized in just one part of the brain). Her seizures are triggering extreme emotions, most often extreme fear followed by a rage response. Part of brain is being affected?
20. After Dale's car accident he had difficulty understanding what others were saying to him. He could speak but what he said made little sense. Where is Dale's brain damage?

**Now create your own scenario below:**