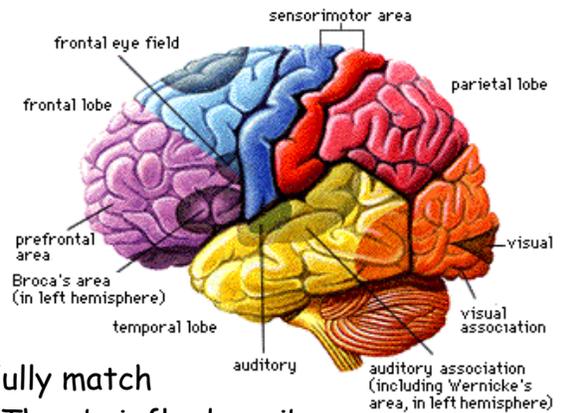


Name _____



Parts of the Brain

Learning Target: Identify how damage to the brain affects behavior.

Directions: Use your textbook and class notes to carefully match the part of the brain with the description given below. Then briefly describe the function of the part of the brain that you chose.

(Some of the brain structures listed below may be used more than once)

Frontal Lobe

Wernicke's Area

Pons

Corpus Callosum

Hypothalamus

Parietal Lobe

Broca's Area

Cerebellum

Hippocampus

Thalamus

Occipital Lobe

Medulla

Reticular Activating System

Amygdala

1. Epileptic seizures have become so severe that the two hemispheres of the brain are disconnected during surgery. This quiets the electrical storm raging between the two sides.
2. A blow to the base of the head makes the person wobble and struggle to run.
3. Damage to this area from a stroke makes a person incapable of sewing or doing other activities with the sensitive finger nerves because what their fingers are doing can't be interpreted.
4. Damage to this area causes a person not to form memories properly, (like the main character is the movie *Memento*)
5. Pressure from a tumor on this part of the brain causes a person to fly off the handle when simple emotional pressures arise. Teens tend to use this part more than their rational frontal lobes when judging situations, causing them to overreact sometimes.
6. A football player hits the back of his helmet on the ground and experiences blurred vision.

7. A malfunction in this organ was once thought to cause synesthesia, a disorder in which letters have colors and sounds make you itch. Certain foods or flavors may have a "pointy" feeling as well.
8. Low brain chemicals and an underdevelopment in this area cause a person to be a hermit who can't play the social game. They just seem odd to other people.
9. Stimulation of this area causes our increased sexual interest as we get older. Understimulation can cause anorexia because normal activity here stimulates girls to eat more so their bodies are ready for childbearing. (Extra credit: starving oneself may make it harder to make a neurotransmitter that in high levels makes a person anxious, name the neurotransmitter).
10. A brain injury makes someone sluggish because areas of the brain pertinent to concentration and paying attention aren't notified. (The key here is that high portions of the brain that need to be stimulated aren't getting notified by this part of the brain. It's more general—not specific to just sensory information.)
11. Crushing of this area causes all vital functions to cease, as when Dale Earnhardt crashed his car into the wall at Daytona.
12. Some cases of dyslexia may be a problem of lack of communication between these two regions of the brain. They deal with language comprehension and sight. (Write one area and one of the lobes)
13. Dreams may be the result of your cerebrum trying to make sense of all sorts of signals that this part of the brain sends during sleep.
14. Imprints on the inside of skulls belonging to the supposed human ancestor *Homo habilis* indicate that it was probably during this stage of evolution that speech evolved. It is found on the left hemisphere of the brain, in the front.