

Psychology:

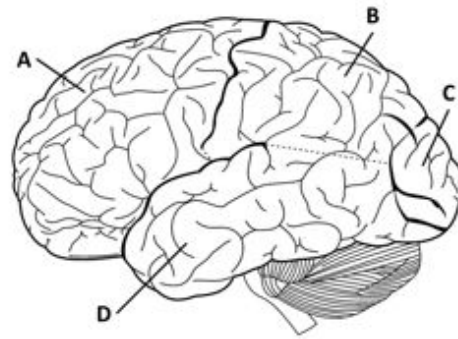
Lesson #13: April 8

Lobes of the Brain

Learning Target: The student will identify, describe, and explain the functions of the structures, lobes, and areas of the brain.

Bellringer

Using the image and questions on this slide, try to answer each of the questions. After going through this lesson, look back at your answers and see how many you got right. If you missed any, fix them!



1. Write the letter (A, B, C, or D) that corresponds with each lobe of the brain.

___ Occipital Lobe

___ Frontal Lobe

___ Temporal Lobe

___ Parietal Lobe

2. Use the brain image to identify the lobe (A, B, C, or D) of the brain primarily responsible for each of the following functions:

___ Critical thinking skills

___ Receiving visual information

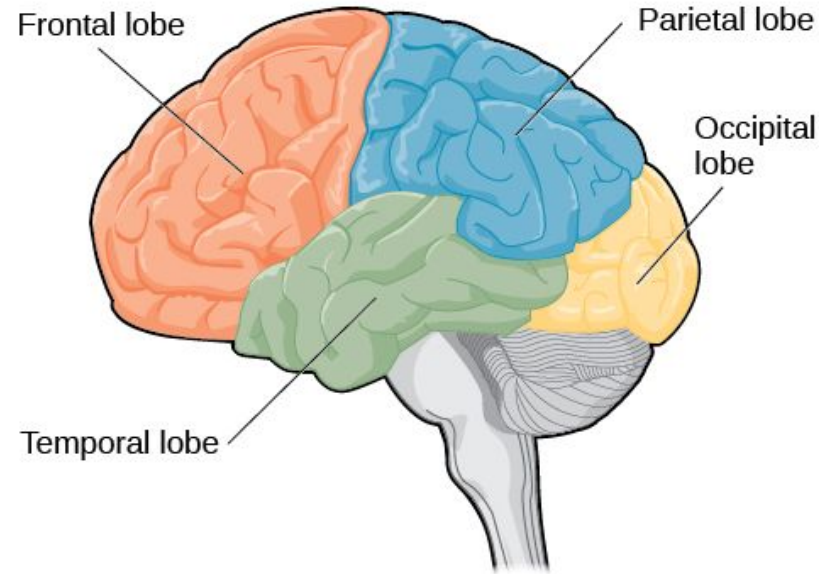
___ Interpreting sounds and language

___ Processing stimuli from touch

___ Controlling emotions

Cerebrum

- The cerebrum is the body's ultimate control and information processing center.
- It is responsible for our higher mental processes (language, memory, thinking, and sensation/perception).
- It is divided into 2 halves called hemispheres with each hemisphere divided into smaller areas called lobes, each one specializing in certain functions.



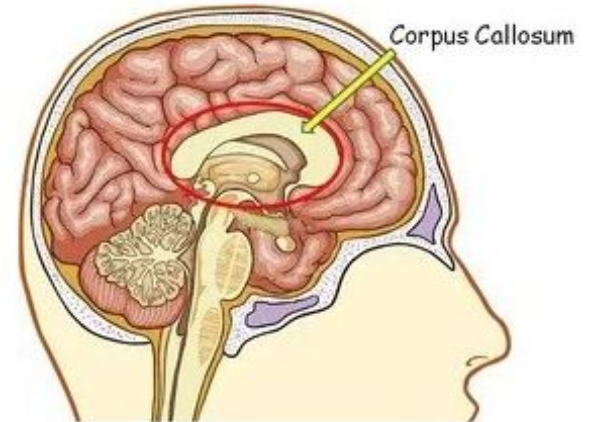
Hemispheres of the Cerebrum

The Cerebrum is separated into two hemispheres (right and left), so we have a right frontal lobe, left frontal lobe, right parietal lobe, left parietal lobe, etc.

The hemispheres are connected by the Corpus Callosum.

The Corpus Callosum allows for the two sides of the brain to communicate with each other.

Any sensation from the right side of the body goes to the left hemisphere of the brain and vice versa.

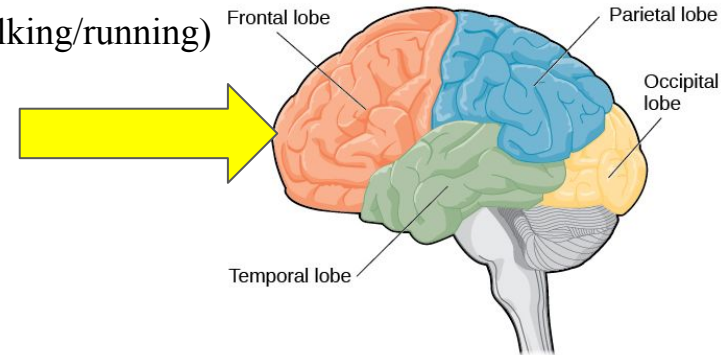


Frontal Lobe

The Frontal Lobe is the largest of the brain's lobes and found at the front of the Cerebrum (see yellow arrow).

Because of its large size (approx. $\frac{2}{3}$ of the Cerebrum), the Frontal Lobe is responsible for many things, but is not involved in sensation/perception.

- Speech and language production, put thoughts into words, understand language
- Some motor skills (coordinate voluntary movements, including walking/running)
- Comparing and classify objects
- Understanding and reacting to the feelings of others
- Forming personality
- Reward-seeking behavior and motivation



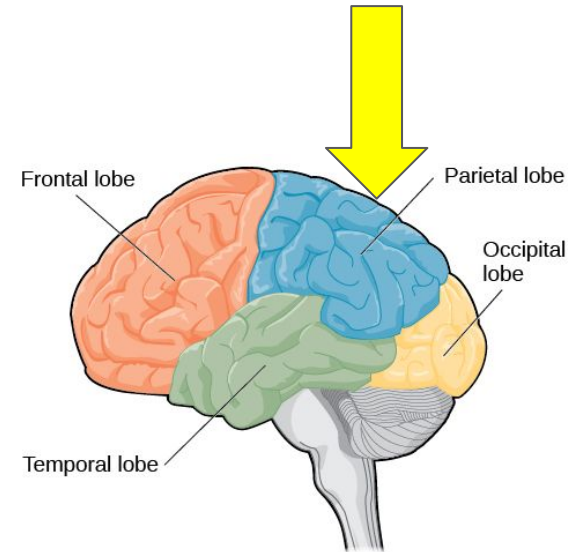
Parietal Lobe

The Parietal Lobe is located on the top and rear of the cerebrum (see the yellow arrow).

The Parietal Lobe is where the following senses are processed:

- Touch
- Temperature
- Pain
- Taste

Damage to the Parietal Lobe would prevent a person from being able to feel things physically or taste things based upon where in the lobe damage has occurred.



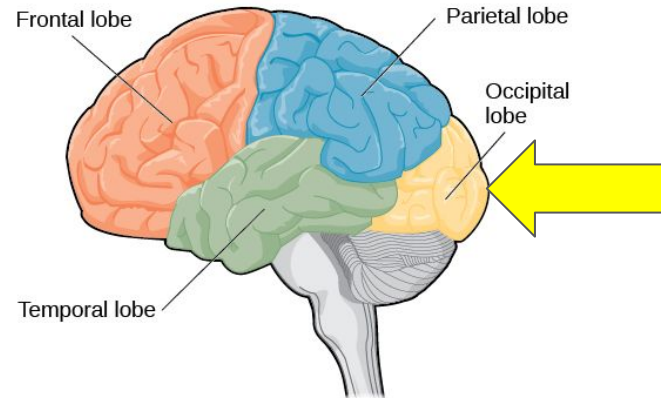
Occipital Lobe

The Occipital Lobe is located on the bottom, back part of the cerebrum (see yellow arrow).

This lobe has one main function:

- Make sense of visual information (sight)

Damage to the Occipital Lobe would prevent a person from being able to process information from their eyes.



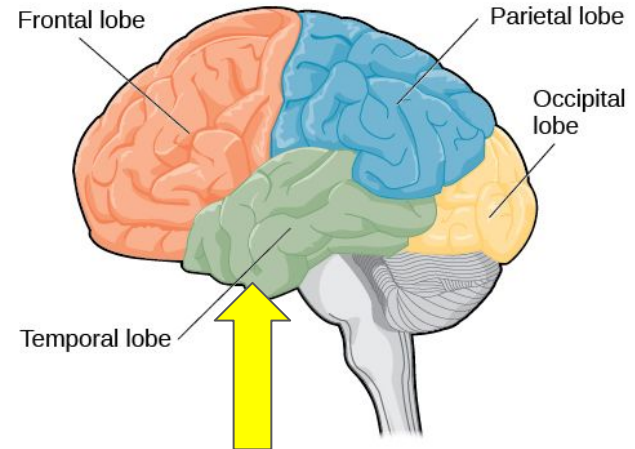
Temporal Lobe

The Temporal Lobe is located on the side of the Cerebrum near the temples (see yellow arrow).

This lobe is responsible for the following functions:

- Receiving/understanding message from the ears (hearing)
- Facial recognition

Damage to the Temporal Lobe could lead a person having difficulty processing sounds and speech.



Practice

Click on the link to open up a Quizlet that gives you several different options to review the material from this lesson. After you click on the link, you can use the choices on the left of the screen to do a variety of review games, flashcards, and a test.

[Psychology Brain Lobes Quizlet](#)

Additional Resources

If you'd like to learn more about the brain, check out some of these resources!

Video: [Crash Course Psychology #4 - Know Your Brain](#) (the info about the lobes is found in the last third of the video, but it has lots of great info about the brain in general and includes the famous story of Phineas Gage...check it out!)

Article: [Arizona State University Ask a Biologist - A Nervous Journey](#) (this site has some really neat coloring/labeling printables if you have printer at home - use the links on the right side of the page)

Article: [Very Well Mind - A Guide to the Anatomy of the Brain](#) (this article has a lot more than just the lobes of the brain, similar to the Crash Course video)