

The Brain

Read Chapter 15.6

Fill in the blanks

- Name 4 things that protect the brain.
 - _____
 - _____
 - _____
 - _____
- _____ junctions form the blood-brain barrier.
- The glial cell that forms the blood-brain barrier is the _____
- The outermost meninge layer that is closest to the skull is the _____ mater and the middle meninge in the _____ mater, with the _____ mater lying directly against the brain tissue.
- There is _____ in the subarachnoid space.
- An average person produces approximately _____ ml of CSF per day.
- The _____ cells located in the choroid plexus make CSF.
- Match the brain region with the correct function. You may use some brain regions more than once. **Thalamus, hypothalamus, pineal gland, medulla oblongata, pons, midbrain, reticular activating system, basal nuclei, amygdala, corpus callosum, hippocampus, frontal lobe, parietal lobe, temporal lobe, occipital lobe, Broca's area, Wernicke's area, cerebellum.**
 - Comprehension of language _____
 - Subcortical region that controls motor movements _____
 - Planning motor movements _____
 - A group of nuclei that controls the pituitary gland _____
 - The primary cardiovascular center and respiratory center _____
 - Long term memories _____
 - Short term memory _____
 - Connects the right and left hemispheres of the brain _____
 - Contains the sensory cortex _____
 - Contains the motor cortex _____
 - Plays a secondary role in regulation of breathing _____
 - Produces a hormone called melatonin that helps us sleep _____

- m. Is the major sensory relay station that sends sensory information to the sensory cortex

 - n. The primary visual center _____
 - o. The primary auditory center _____
 - p. Contains a subregion called the substantia nigra that produces dopamine that is important for regulating motor movements _____
 - q. Plays a significant role in emotions, particularly fear, anxiety, and aggression

 - r. A subregion of the frontal lobe that is required for speech _____
 - s. Important for coordinating multiple muscle groups in complex movements

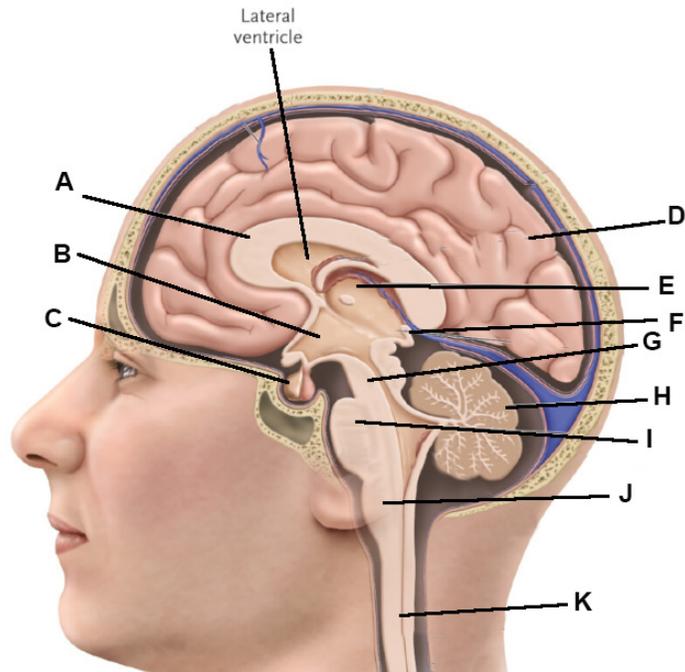
 - t. Triggers reflexes such as coughing, sneezing, and vomiting _____
 - u. Causes dreaming _____
 - v. Regulates/ inhibits the limbic system so that we act appropriately in social situations

 - w. The area of the cerebral cortex that processes and interprets sensory information

 - x. Part of the brainstem that makes us conscious _____
 - y. We use this part of our brain to think, problem-solve, plan, and set goals

 - z. Regulates thirst, hunger, growth and reproduction _____
9. The _____ fissure divides the brain into the left and right hemispheres.
 10. Brain functions such as visuospatial, facial recognition, imagination, and reading body language tend to be associated with the _____ hemisphere
 11. Brain functions such as mathematics, recognizing words and patterns tend to be associated with the _____ hemisphere
 12. The combined structures that are involved in emotions is called the _____ system.
 13. The _____ is our sense of smell.
 14. The _____ is important for connecting emotional information and plays a role in depression
 15. We tend to have stronger memories about past situations if they involved

16. The _____ divides the frontal lobe and the parietal lobe
17. The _____ gyrus is the motor cortex
18. The _____ gyrus is the sensory cortex
19. Name 2 regions of the body that have a large distribution on the motor cortex and the somatosensory cortex
- a. _____
- b. _____
20. Label the diagram: **Medulla oblongata, pons, cerebrum (cerebral cortex), thalamus, midbrain, cerebellum, hypothalamus, pineal gland, spinal cord, pituitary gland, corpus callosum**



A _____

G _____

B _____

H _____

C _____

I _____

D _____

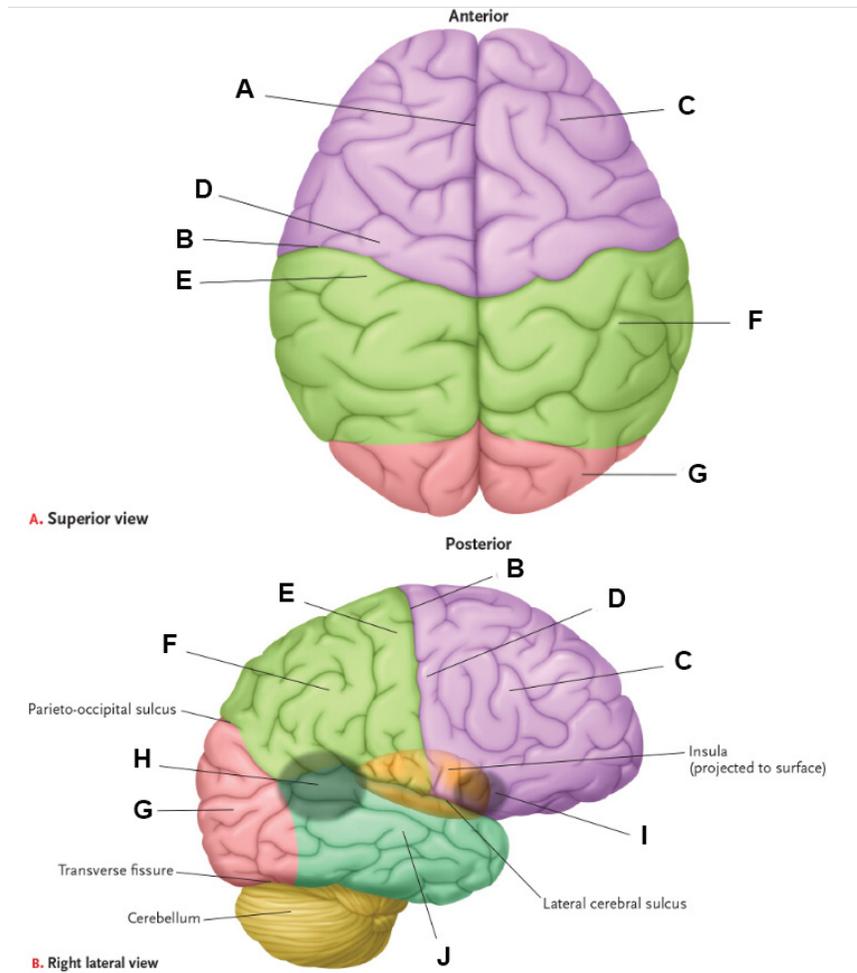
J _____

E _____

K _____

F _____

21. Label diagram: **Occipital lobe, frontal lobe, parietal lobe, temporal lobe, central sulcus, longitudinal fissure, Broca's area, Wernicke's area, Pre-central gyrus, post-central gyrus**



A _____

B _____

C _____

D _____

E _____

F _____

G _____

H _____

I _____

J _____