

Bio 22 PAL Worksheet
The Brain

1. Quick Review - Provide the description of the following structures:
 - a. Ganglion –
 - b. Nucleus –
 - c. Nerve –
 - d. Tract –
 - e. Funiculus –
 - f. Pathway –
 - g. Cortex –

2. What does white matter consist of, and what is its function - are there any differences between CNS and PNS in terms of this white matter?

3. Draw a side view of the brain and:
 - a. Label ALL major lobes of the brain
 - b. Describe some functions of each lobe
 - c. Also, label: primary motor complex, primary somatosensory cortex, lateral fissure, central sulcus, primary visual cortex, and primary auditory cortex

4. Provide the function(s) of the following structures of the brain:
- Cerebrum-
 - Thalamus-
 - Hypothalamus (has many)
 - Midbrain-
 - Pons-
 - Medulla Oblongata
 - Cerebellum-
- Bonus: Which two of these structures make the Diencephalon?
 - Bonus: Which three of these structures make the Brainstem?
5. What flows through the ventricular system? Where does it travel after it exits the ventricular system? Where does it go once it finishes circulating around the brain and spinal cord?
6. Which region of the central nervous system would be damaged if a patient walks like they are drunk?
7. A stroke results in paralysis of the left hand. Which region of the brain was impacted?

8. A stroke results in loss of touch and feeling in the left leg. Which region of the brain was impacted?

9. You overhear interesting gossip on your way to Anatomy, what part of your brain did the tea initially reach?

10. What is the Blood Brain Barrier and why is it so important?

11. Provide the function(s) of the following cortexes:
 - a. Primary Visual Cortex

 - b. Primary Auditory Cortex

 - c. Primary Motor Cortex

 - d. Primary Somatosensory Cortex

 - e. Prefrontal Cortex