**Extension: Brain Dissection Lab**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Biology 12**

**Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Directions:**

Complete a proper lab report for the dissection of the brain making sure to:

* include the photos asked to be taken during the lab under the observation and data section
* complete the analysis questions below and include them under the analysis and questions section

**Analysis Questions:**

1. Although the brain you dissected did not contain meninges the brain is surrounded by them. Identify what the 3 layers are to the meninges and state what they do.
2. Many functions of the Cerebral cortex are distributed among many brain regions. However, some functions are associated primarily with portions of one lobe. Much of the information about the functions of the four lobes is obtained using research from patients with damage to one of their lobes.
3. If a patient showed signs of impaired motor ability to the right side of their body and impaired speech what part(s) (lobe) of the brain would you think was damaged?
4. Damage to which lobe(s) would you suspect occurred if a patient was struggling to learn and remember new words?
5. Damage to which lobe(s) would cause you to struggle with parking the car?
6. Pons is the Latin word for “bridge”, why might this structure in the brain be called the pons?
7. What is the difference between gray and white matter in the brain? Is the cerebral cortex composed of gray or white matter?
8. You will need to complete some research for this question…… What is a concussion and what are the repercussions to the brain and individual when a concussion occurs. Explain why having more as well as having more severe concussions causes worse repercussions.
9. Explain how dementia and chronic traumatic encephalopathy (CTE) are related to concussions.