

Investigation 3.13A:

Dr. _____

Worksheet 3.13A1

P:____ Date:_____

The Brain

Directions: Answer the following questions based on your reading of chapter 3.13A.

1. What does an 'anatomist' study?

2. What does a 'neuroanatomist' study?

3. What name describes the two sides of your brain?

4. Each brain hemisphere contains how many lobes?

5. Name the lobes of your cerebral cortex:

a. _____

b. _____

c. _____

d. _____

6. What name do we give the ability of the brain regain normal function following major brain injury? _____

7. What signs should you recognize and attribute to a possible stroke?

8. Which lobe of the brain controls your emotions, passions, and hopes?

9. What is the primary function of the Occipital Lobe?

10. Why does each parietal lobe contain two invisible diagrams of your entire body?

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11. About what percent of the information collected by the retina is forwarded by optic nerve to the brain? _____%
12. Which brain area, not a lobe, bears responsibility for coordination of all muscle movement in your body? _____
13. List at least three functions of the brain stem.
- a. _____
 - b. _____
 - c. _____
 - d. _____
14. How many cells does your brain contain? _____
15. What is an “action potential”?
- _____
16. Groups of neurons, along with their axons and dendrites, make up nerve systems known as _____.
17. Briefly describe the concept of “backpropogation”.
- _____
- _____
18. Describe “artificial intelligence” (you can look it up on the internet)
- _____
- _____
19. The symptoms of a stroke depend upon what area of the brain stops receiving blood flow and oxygen. Where would you look for a stroke that paralyzes the left arm? _____
20. Can you think of an evolutionary advantage for the cross wiring of the brain so the right hemisphere has primary control of the left side of the body?
