The ‘External’ Brain (Examining the Structures of the Brain)

**Directions:** Using all available resources (textbooks, internet, and the models of the brain) - complete the statements and make any drawings in the spaces provided.

1. Name the four major parts of the brain:
   a. __________________________________________
   b. __________________________________________
   c. __________________________________________
   d. __________________________________________

2. What is the size and location of the cerebral hemispheres in comparison to the other three main parts of the brain?

______________________________________________________________________________
______________________________________________________________________________

3. Name four functions that the cerebrum is responsible for in the human body.
   a. __________________________________________
   b. __________________________________________
   c. __________________________________________
   d. __________________________________________
4. Color the following parts of the cerebral hemisphere: orange for the frontal lobe, yellow for the parietal lobe, green in the occipital lobe, blue for the temporal lobe.

5. Using the diagram above, identify the letter that corresponds to the lobes you colored above. Using the model of the brain, identify the number that corresponds to the lobes.
   
   a. Frontal _________________
   b. Parietal _________________
   c. Occipital _________________
   d. Temporal _________________
6. What is a sulcus (sulci) on the brain?

______________________________________________________________________________

7. What is a gyrus (gyri) on the brain?

______________________________________________________________________________

8. What is a fissure on the brain?

______________________________________________________________________________

Use the diagram on the previous page and the model of the brain to answer the following about different structures of the brain.

9. Label and name
   Fissure A __________________________________________________________
   What number is this on the brain model? ________________

   Fissure E __________________________________________________________

   Fissure K __________________________________________________________

10. Why can’t the Longitudinal Fissure be seen in this diagram?

______________________________________________________________________________

11. Name of region B ____________________________ based on STRUCTURE.

12. Name of region B ____________________________ based on FUNCTION.

13. What number is this region on the brain model? ______________________

14. What lobe is region B in? ________________ What does it do?

______________________________________________________________________________

15. Name of region C ____________________________ based on STRUCTURE.

16. Name of region C ____________________________ based on FUNCTION.

17. What number is this region on the brain model? ______________________
18. What lobe is region C in? ______________________ What does it do? ________________________________________________________________________________

19. Draw a dark blue region on the diagram to show the auditory area of the brain. What does auditory mean? ________________________________________________________________________________

20. Draw a Blue dotted line circle to show the olfactory area. What does olfactory mean? ________________________________________________________________________________

21. What lobe of the brain are the Auditory and Olfactory region in? ________________________________________________________________________________

22. What does it mean by VOLUNTARY motor activity? ________________________________________________________________________________

23. Draw a dark solid red oval to show Broca’s area. What lobe is it in? ________________________________________________________________________________

24. What happens if Broca’s area is damaged? ________________________________________________________________________________

25. Shade in brown ovals to show the speech and reading areas of the brain. What lobe are they in? ________________________________________________________________________________

26. Draw a red dotted oval to show the Language comprehension area. ________________________________________________________________________________

27. What lobe is it in? ___________________________

28. What do the speech and the language comprehension areas do for a person? ________________________________________________________________________________
29. Color region G on the model green.
   
a. What is the name of this region? ____________________________

   b. What number is this region on the brain model? _________________

   c. What is the main function of this region?
      ______________________________________________________________
      ______________________________________________________________

30. Color region H on the model purple.
    
a. What is the name of this region? ____________________________

   b. What number is this region on the brain model? _________________

   c. What is the main function of this region?
      ______________________________________________________________
      ______________________________________________________________

31. Color region I on the model black.
    
a. What is the name of this region? ____________________________

   b. What number is this region on the brain model? _________________

   c. What is the main function of this region?
      ______________________________________________________________
      ______________________________________________________________