

Name _____

Date Due _____

BRAIN DISSECTION

Learning Target: Identify the structures of the brain and state the function of each structure. (K)

Preparation:

- Begin by opening up the “Brain Dissection” power point on the web-site. Make sure both you and your lab partner can see the computer screen.
- Next prepare your dissecting tools and obtain a brain from the center cart.
- Read the directions on how to perform a successful brain dissection.
- *Take at least one picture of each underlined word. Name the picture right away so you know what it is.*

STEP 1

1. In Latin, what does “dura mater” mean? _____

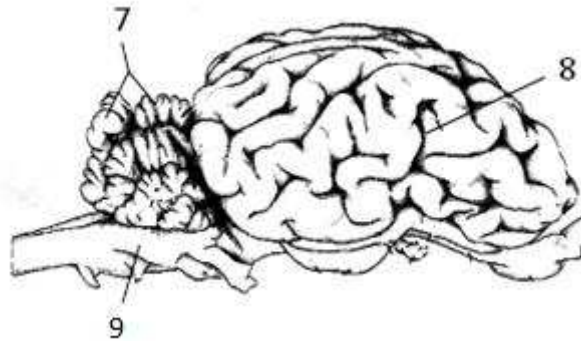
2-4. Describe the dura mater. _____

5. What is the function of the dura mater? _____

6. The dura mater, arachnoid mater and pia mater are collectively called the _____.

STEP 2

Label the structures of the brain shown in the picture below. Take a picture of each structure.

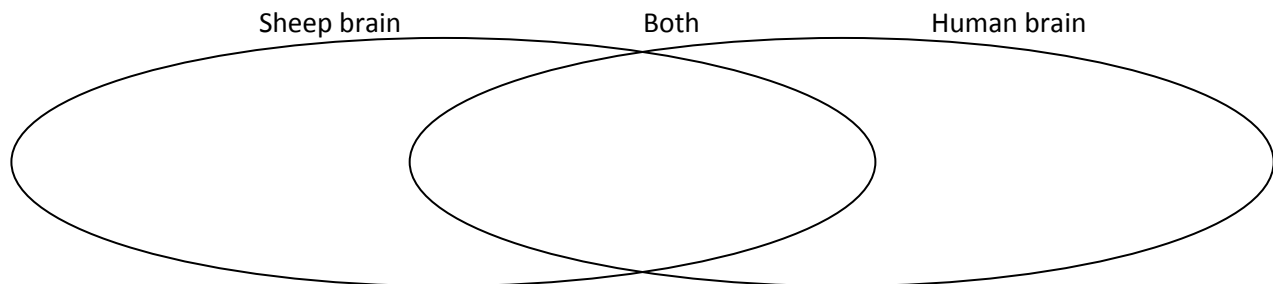


10. Which structure in the picture is used to read this sentence? _____

11. Which structure is used to help you stand up right while performing the lab? _____

12. Which structure is used to keep your heart pumping? _____

13-15. Fill in the Venn diagram with 1 similarity and 1 distinguishing characteristic.



STEP 3

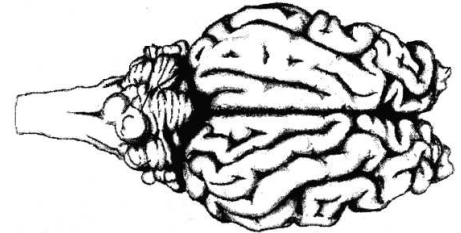
16. What are the ridges of the cerebrum called? _____

17. What are the grooves of the cerebrum called? _____

18. Why isn't the surface of the cerebrum smooth? _____

19-20. Observe the dorsal side of the brain. Find the longitudinal fissure. Label it on the picture and state its purpose.

21. What is a fissure?



STEP 4

22. Label the olfactory bulbs.

23. What sense the olfactory bulbs are associated with.

24. What is a "tract"? (pg. 232) _____

25. Label the optic nerve.

26. What sense are the optic nerves associated with?

27. What is the purpose of the optic chiasma? (use internet)

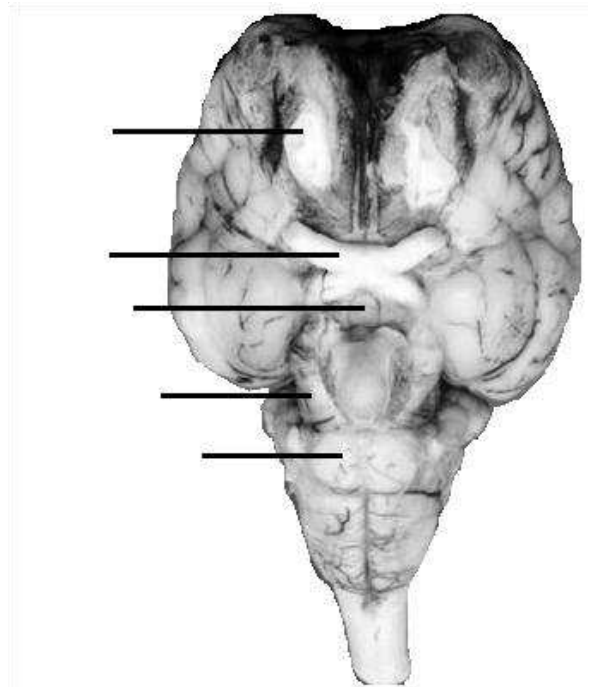
28. Label the oculomotor nerve. It allows for eye movement.

29. Label the mammillary body.

30. What is its function? (use internet) _____

31. Label the pons.

32. What part of the brain does the pons belong to? _____



STEP 5

Now make a midsagittal cut through the brain.

33. Find and label the corpus callosum.

34. What is its function? _____

35. Label the lateral ventricle.

36. What substance is made in the lateral ventricle? _____

37. What is an aqueduct? _____

38. Label the 4th ventricle.

39. What structure is superior to the 4th ventricle? _____

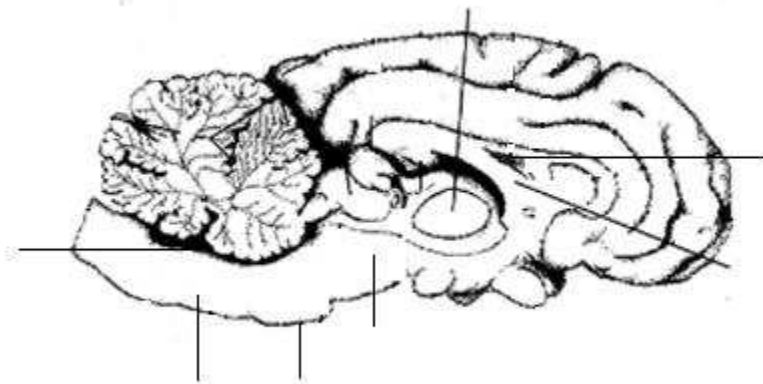
40. Label the thalamus.

41. What is the only sense that is not interpreted in the thalamus? _____

42. Label the medulla oblongata.

43. Label the pons.

44. Label the midbrain.



STEP 6

Make a coronal (frontal) section perpendicular to the longitudinal cerebral fissure.

45. Is the outer 1/8 layer made of gray or white matter? _____

46. The darker area, gray matter, is the cortex. The cortex contains the _____.

47. The white matter contains the _____.

48. What is the name of the chamber shown on slide 20? _____

Finish the power point and clean up.