Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_

**Psychology 101**

**The Behaving Brain Video Guide**

Fill in the blank.

1. The adult human brain weighs about \_\_\_\_\_\_\_\_\_\_\_\_ pounds.

2. There are about \_\_\_\_\_ trillion cells in the brain.

3. There are over 200 types of these cells, but they all do three things:

 A. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ information

 B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ information

 C. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ information

4. In a neuron, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (finger like projections) receive info from another neuron.

5. Information is then passed into the cell body or \_\_\_\_\_\_\_\_\_\_\_\_\_.

6. Next, the information passes through the length of a cell along the \_\_\_\_\_\_\_\_\_\_\_\_\_ by electrical impulses.

7. The impulse ends at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8. Chemicals are released to travel through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ to another neuron.

9. Chemicals released by neurons are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. Neuroscientists are guided by the assumption that everything the brain does is ultimately explainable by

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ events taking place within it.

**Quick Tour of the Brain**

11. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ connects nerves to the brain.

12. The **cerebellum** coordinates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, posture, and balance.

13. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system controls internal workings and regulates emotions.

14. The four important parts of the limbic system are: A. the **amygdala**  B. the **hippocampus**

 C. the **hypothalamus**, and D. the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Each of the four parts has a function:

15. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the pathway into the limbic system of sensory impulses.

16. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the basic information processor and stores memories.

17. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the liaison between body and brain and releases hormones.

18. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the relay station; it sends signals from body to brain.

19. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the largest part of the brain and is divided into the

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ hemispheres which are connected by the **corpus callosum.**

20. The outer layer of the **cerebrum** is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

21. In the past, information about parts of the brain and how they work came from autopsies of patients

 suffering from brain damage, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and disease.

22. With \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ psychologists use **lesioning** to find out about how parts of the brain work.

23. Another way to study the brain is to stimulate regions with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or electrodes.

24. Today, we have technology that gives us brain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

25. Brain wave electrical patterns are seen using an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (use acronym).

26. Some brain images use colors. Normal is an “earth color” of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Excess

 activity is indicated by the color \_\_\_\_\_\_\_\_\_\_\_\_\_\_ with an abnormal excess showing a bright

 orange. Low activity is indicated by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

27. Some psychologists look at the chemicals in the brain. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Opiod

 peptides), like narcotics, can reduce pain and increase pleasure.

28. The experiment with rats showed that drugs led to the mice \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ what had

 been learned.

29. The widespread misconception about amnesia is that a person loses memory of the \_\_\_\_\_\_\_\_\_\_\_,

 when actually it is new memory that is inhibited.

30. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is not a storage area for memories, but it contains the machinery

 that helps to build new memories.

**Psychology 101**

**The Behaving Brain Video Guide**

Use the following Word Bank to help you spell some of the words needed in the fill-in guide.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| amygdalaanimalsaxonbiologicalbrain imagining | brain stemcerebellumcerebrumchemical(s)corpus callosum | cortexdendrites(EEG)-electroencephalograph endorphinshemispheres | hippocampushypothalamuslimbic systemneurotransmitterssoma | stimulatedstrokesynaptic gapterminal buttonsthalamus |