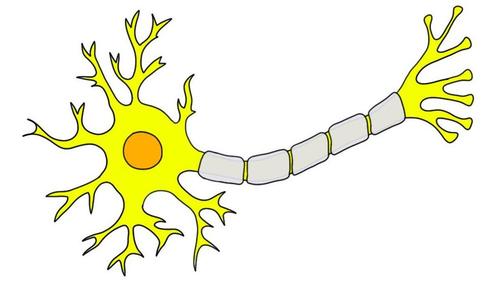
Nervous System Lecture Exam

1. The central nervous system (CNS) consists of:
   1. Brain
   2. Spinal nerves
   3. Spinal Cord
   4. Cranial Nerves
   5. Peripheral Nerves
2. (Fill in the blank) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ transmit nerve impulses along nerve fibers to other neurons. While \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ carry out a variety of functions to aid and protect components of the nervous system.
3. Which of the following is related to the autonomic nervous system?
   1. Involuntary
   2. Voluntary
   3. Sympathetic
   4. Parasympathetic
   5. Somatic Nervous System
4. Please describe what is happening inside your body when a fly lands on your leg and you swat it away. Please include the words *sensory, integration, and motor* to help describe what is happening. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Which of the following neuroglial cells are found in the peripheral nervous system (PNS)? *(Extra credit 1pt, if you can give the function of the neuroglial cells found in the PNS)*
   1. Schwann cells
   2. Ependymal
   3. Astrocytes
   4. Oligodendrocytes
   5. Microglial cells
2. (Label) Use the following image to label the pieces of a neuron. *Axon, Cell Body, Myelin, Dendrite.*



1. The image above is an example of a \_\_\_\_\_\_\_\_\_\_\_.
   1. Bipolar neuron
   2. Unipolar neuron
   3. Multipolar neuron
   4. Neuroglial cell
   5. A bad hair day
2. What is a cell’s resting potential?
   1. -50mV
   2. -30mV
   3. 55mV
   4. -70mV
   5. -55mV
3. When a cell reaches threshold, it has been \_\_\_\_\_\_\_\_\_\_\_\_.
   1. Depolarized
   2. Repolarized
   3. Became more negative
   4. Became less positive
   5. Returned to resting potential
4. Briefly explain what a neurotransmitter does. (Extra credit 1pt, if you can name one and what it specifically does). \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the function of the meninges?
   1. Reduce the weight of the brain
   2. Reduce the weight of the skull
   3. To protect the brain and spinal cord
   4. To create greater surface area
   5. Anchor the spinal cord and brain together
6. Name the layers of the meninges from superficial to deep.

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1. Which of the following are functions of cerebrospinal fluid?
   1. Protection
   2. Buoyancy
   3. Excretion of waste products
   4. Keep the brain moist
   5. Endocrine medium for the brain
2. Which part of the brain processes sensory input?
   1. Cerebrum
   2. Diencephalon
   3. Cerebellum
   4. Brain Stem
   5. White matter
3. Which part of the brain coordinates muscular activity?
   1. Cerebrum
   2. Diencephalon
   3. Cerebellum
   4. Brain Stem
   5. White Matter
4. Which part of the brain is associated with higher mental functions?
   1. Cerebrum
   2. Diencephalon
   3. Cerebellum
   4. Brain Stem
   5. White matter
5. Which part of the brain coordinates and regulates visceral activities?
   1. Cerebrum
   2. Diencephalon
   3. Cerebellum
   4. Brain Stem
   5. White matter
6. Which lobe is responsible for voluntary muscle control, problem solving, and planning?
   1. Frontal
   2. Parietal
   3. Temporal
   4. Occipital
   5. Cerebellum
7. Which lobe is responsible for vision?
   1. Frontal
   2. Parietal
   3. Temporal
   4. Occipital
   5. Cerebellum
8. Which part of the temporal lobe is responsible for short term memory?
   1. Thalamus
   2. Hypothalamus
   3. Hippocampus
   4. Pineal Gland
   5. Arbor Vitae
9. Where is cerebrospinal fluid made?
   1. Arachnoid mater
   2. Dura mater
   3. Choroid plexuses
   4. Subdural space
   5. Subarachnoid space
10. Name at least two ways the hypothalamus regulates homeostasis.
    1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What system in your brain is responsible for controlling emotional experience and expression?
    1. Brain stem
    2. Limbic
    3. Cerebellum
    4. Cerebrum
    5. Arbor Vitae
12. What part of the brain stem influences your cardiac center, vasomotor center, and respiratory center?
    1. Pons
    2. Corpora Quadragemina
    3. Midbrain
    4. Medulla oblongata
    5. Arbor Vitae
13. Which cranial nerve is responsible for vision?
    1. CN I
    2. CN II
    3. CN III
    4. CN IV
    5. CN V
14. Which cranial nerve controls various functions of the PNS?
    1. CN VIII
    2. CN IX
    3. CN X
    4. CN XI
    5. CN XII
15. Which cranial nerve is responsible for facial sensations?
    1. CN IV
    2. CN V
    3. CN VI
    4. CN VII
    5. CN VIII
16. Compare and contrast the sympathetic and the parasympathetic nervous system. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_