

Biology 3201  
Review Checklist, Nervous System Quiz 1

1. Explain the basic structure and function of the central nervous system ( brain and spinal column)
2. Explain how this central nervous system is protected with meninges, cerebrospinal fluid, and bone
3. Locate and explain the function of the following brain parts : cerebrum, cerebellum, medulla oblongata, thalamus, hypothalamus, midbrain, pons, corpus callosum  
[http://www.biologyjunction.com/sheep\\_brain\\_dissection\\_bi.htm](http://www.biologyjunction.com/sheep_brain_dissection_bi.htm)  
[http://www.brainhealthandpuzzles.com/images/labeled\\_diagram\\_human\\_brain\\_sagittal.jpg](http://www.brainhealthandpuzzles.com/images/labeled_diagram_human_brain_sagittal.jpg)
4. Describe the arrangement and function of the peripheral nervous system - autonomic ( sympathetic / parasympathetic) and somatic
5. Identify and describe the four things required for a neural response to occur
6. Describe the structure of a typical neuron and explain the role of each part
7. Explain the difference between the three types of neurons
8. Explain in detail the processes of creating and passing an impulse along the length of a neuron, and the action of neurotransmitters  
Youtube video : Neurotransmitter Synapse 3D Animation
9. Describe the terms “stimulus”, “threshold strength stimulus”, “action potential”, presynaptic neuron, postsynaptic neuron, all or none response
10. Describe the transmission of an impulse across a synapse, and the specific roles of GABA, acetylcholine, Glutamate, Serotonin, Noradrenaline, and Dopamine
11. Describe the roles of acetylcholinesterase, SSRI medications, MAOI medications on neurotransmitter levels
12. Be familiar with the information found in the Drugs and Homeostasis STSE assignment