**Chapter 7 Notes: THE NERVOUS SYSTEM**

**7.1: Organization of the Nervous System**

A. Nervous System Functions

1. Sensory Input Function -

2. Integrative Function -

3. Motor Output Function –

          - Homeostasis. Motor neurons.

B. Structural Classification - The nervous system is divided into two parts:

1. Central Nervous System (CNS) - brain and spinal cord  
2. Peripheral Nervous System (PNS) - peripheral nerves through the body  
        - includes 31 pairs of \_\_\_\_\_\_\_\_\_\_\_  
        - includes 12 pairs of \_\_\_\_\_\_\_\_\_\_\_

- Somatic Nervous System (skeletal muscles)  
- Autonomic Nervous System (smooth muscles, glands)

C. Functional Classification – Direction of Impulse

1. Sensory (Afferent) Division – impulse travels from \_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Motor (Efferent) Division – impulse travels from \_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (muscles and glands) resulting in a motor response.

a. Somatic Nervous System (skeletal muscles) -   
b. Autonomic Nervous System (smooth muscles, glands) -

i. Sympathetic -

ii. Parasympathetic -

**7.2: Nervous Tissue – Structure and Function**

A. Nerve – bundles of neurons

Neuron – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; transmit information to other nerves, tissues, or cells.

1. Dendrite -
2. Axon
3. Neurofibril - fibers within the axon
4. Chromatophilic substance
5. Myelin
6. Nodes of Ranvier

