

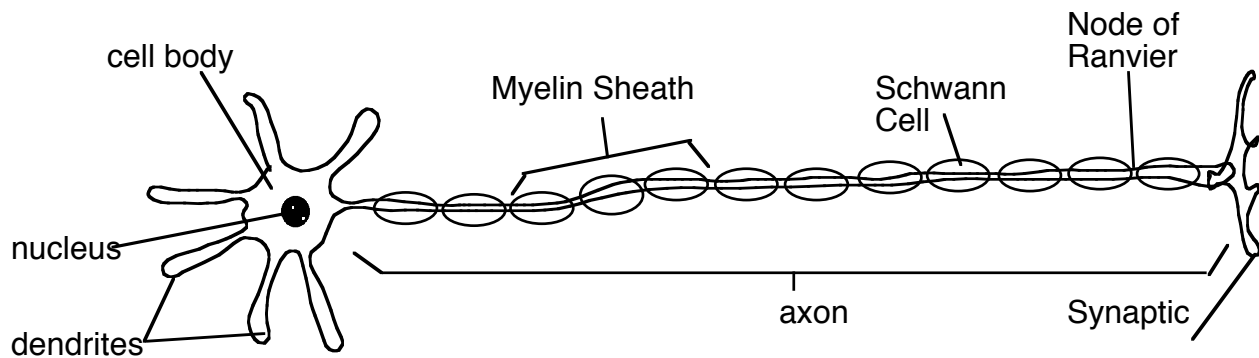
# The Nervous System

## A. Functions of the Nervous System

1. Sensory Input:
  - conduction of Signals from sensory receptors to integration centers
  - Ex. light-detecting cells in eyes
2. Integration:
  - interpreting information & associating it with appropriate response
  - CNS
3. Motor Output:
  - conduction of signals from CNS to effector cells
  - (muscles and glands)

## B. Neurons

1. motor neuron = a nerve cell which transmits impulses from the brain to a muscle gland
2. Structure of Motor Neuron:

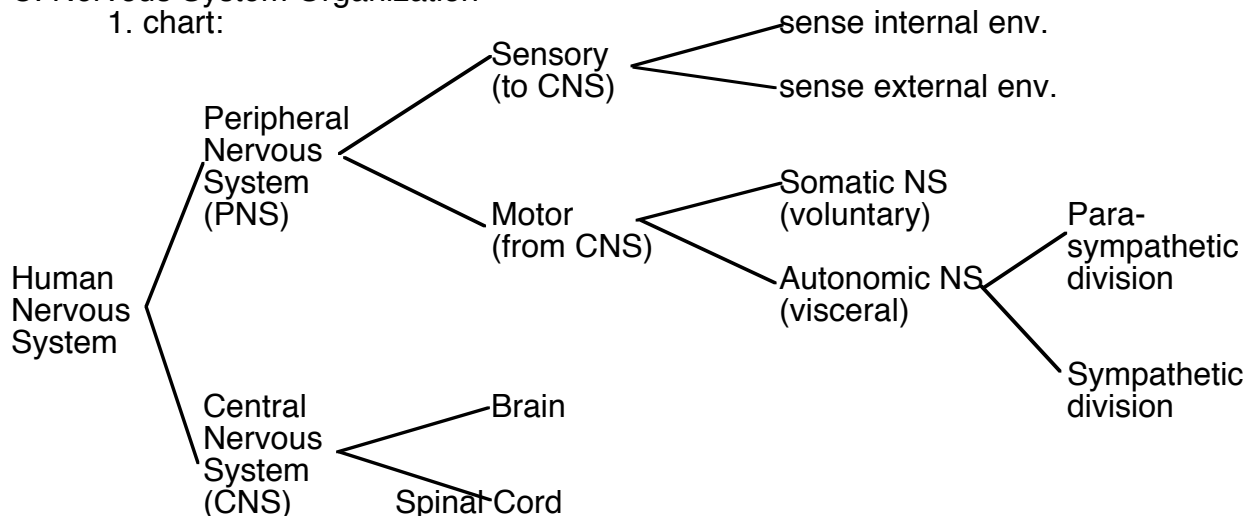


### 3. Classes of Neurons

- a. Sensory Neurons
- b. Interneurons (in CNS only connect to neurons)
- c. Motor Neurons

## C. Nervous System Organization

1. chart:



## 2. Some Details

- a. Somatic NS - skeletal muscle (voluntary & reflexes)
- b. Autonomic NS - smooth and cardiac muscle, organs of the digestive, cardiovascular, excretory and endocrine systems
- c. Parasympathetic division - enhance activities that gain and conserve energy  
ex. digestion; slow heart rate
- d. Sympathetic division - energy consumption and action  
ex. increased heart rate