

Nervous System

1. Which parts of the nervous system are responsible for the following functions: sensory input, integration and motor output. B. What are some other overall functions of the nervous system in relation to how the body functions.
2. What are the two major divisions (and their abbreviations) of the nervous system? B. What are these two divisions made up of physically (parts) C. What are the functions of these two divisions?
3. A. The PNS consists of two divisions: the Sensory and Motor divisions. Describe the basic function of each. The motor division is divided into the Somatic (voluntary) and Autonomic (involuntary). What are the functions of these two divisions? Give some examples of systems controlled by each.
4. The sensory division receives information from two general sources, one group of sensors senses the external environment and the other group senses the internal environment. List and describe the 5 “special senses” which sense the external environment. Give example of the types of information received by the internal sensors.
5. The autonomic portion of the PNS is also divided into two different functions: the sympathetic (panic) and parasympathetic (homeostasis). What are the overall functions of these two divisions? Give some examples of a systems/structures controlled by each.
6. A. Name and describe the structures that function to protect your brain and spinal cord. B. What are some of the major functions of the spinal cord?
7. A Describe the structures and pathways involved in transmitting the impulses of each of the five special senses to the brain. What is the difference between mechanoreceptors, chemoreceptors and photoreceptors? Which senses use which type of sensor?
8. Describe how sound waves get into the ear. List the structures along the pathway taken by the sound waves as they travel to the inner ear.
9. What is the semicircular canal? Where is it located and what is it’s function?
10. Describe the anatomy of the eye. Describe the iris, lens, pupil, retina, optic disc/nerve, rods and cones. For each structure describe its location and how it functions in vision.