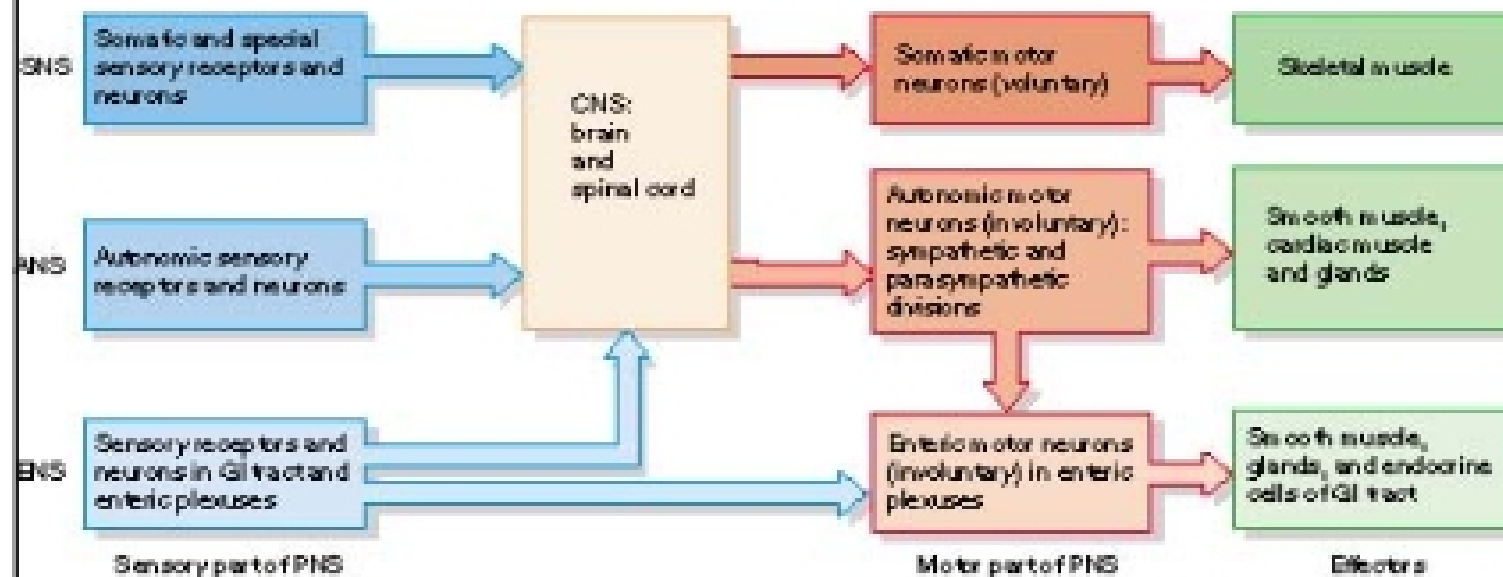


Organization of the Nervous System



In this flow chart, what do the components in blue have in common?

Explain why the Enteric Nervous System is referred to as the "little brain".

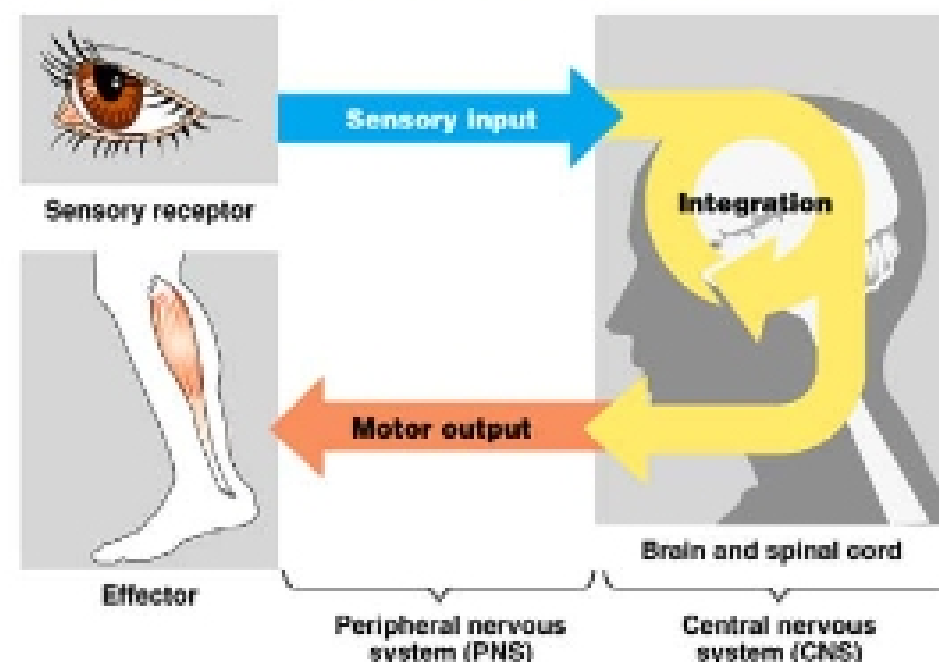
Where are the Autonomic sensory receptors located?

Basic Tasks of the Nervous System

Sensory Input:
Receptors monitor both external and internal environments.

Integration: Process the information (at *synapses*) and often integrate it with stored information.

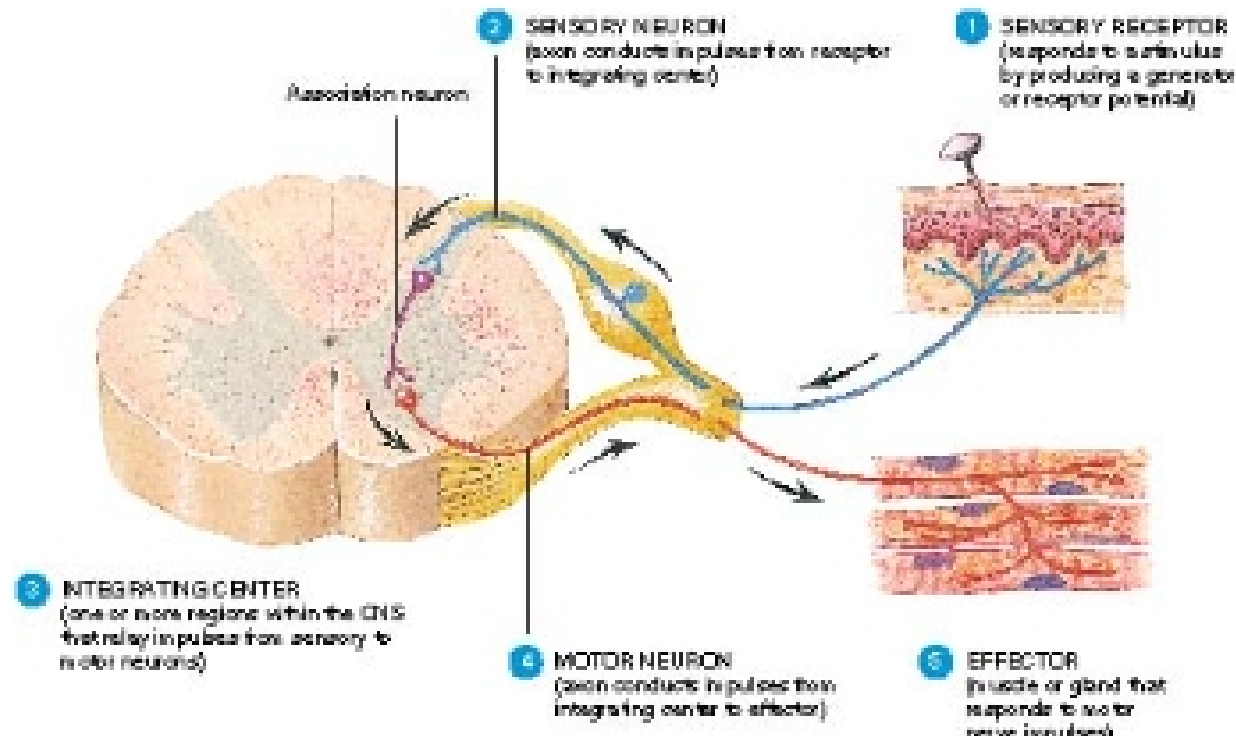
Motor output: If necessary, signal *effector* organs to make an appropriate response.



How is this similar to the normal function of the endocrine system? How is it different?

Describe the receptor, control center, and effector in several neural reflexes.

Basic Structure of a Reflex Arc



Review the lab exercise on reflexes that begins on p. 98 of your packet, and the worksheet on p. 102.

Multipolar neuron

Are dendrites always shorter than axons?

Can the neuron processes that conduct information toward the cell body also be myelinated?

The diagram shows a multipolar neuron with its cell body (soma) containing a nucleus and nucleolus. Dendrites and an axon are shown extending from the cell body. The axon is covered by a myelin sheath, which is composed of Schwann cells. Labels include: Axon, Myelin sheath, Schwann cell, Myelin sheath, Axon hillock, Myelination, Axon, Myelin sheath, Schwann cell, Nucleolus, Nucleus, Mitochondrion, Cytoplasm, Dendrite, and Cell body. A cross-section of the axon shows the nucleus, cytoplasm, and myelin sheath. A micrograph shows a multipolar neuron with labels for Nerve fiber, Cell body, and Processes.