Review:
- central nervous system
- protection of the CNS
- parts of the brain
- function of parts of the brain

The Peripheral Nervous System:
- this system includes the nerves that lead into and out of the Central Nervous System

(a) Somatic Nervous System:
- made up of sensory nerves that carry impulses from the body's sense organs to the CNS and the motor nerves that transmit the commands from the CNS to the muscles
- this is the voluntary part of the nervous system
(b) Autonomic nervous system

- this part of the nervous system controls involuntary responses

- controls the organs when body is at rest and is also responsible for the fight or flight response

- the autonomic system has two different parts:

(i) Sympathetic Nervous System:

- adrenaline is released which increases the heart rate and breathing rate

- this brings more blood and oxygen to the muscle cells so a person can fight or flee in times of stress

- blood sugar is also released from the liver to provide energy

( the sympathetic system prepares you for an event)
(ii) Parasympathetic Nervous System:

- returns the body to normal by slowing down the organs involved (opposite of sympathetic)

- very important because body needs to "come down" after a successful event

- if this did not happen health problems would develop: high blood pressure, heart problems, hyperventilation, etc

* see figure 12.5 on page 394
Nervous impulses are transmitted from the receptors to the brain (this is done by the neurons).

The impulses are analyzed and interpreted. (done by the brain and spinal cord)

Impulses are sent to the effectors and an action results (your leg muscles allow you to run very fast).

Types of Neurons: (page 396)

- **Sensory Neuron:** Carry impulses from receptors to the brain and spinal cord.
- **Interneurons:** Connect motor and sensory neurons in the brain and spinal cord.
- **Motor Neurons:** Carry impulses from the brain and spinal cord to the effectors.
Parts of a Neuron:
- see sheet provided.

Nervous System Video

Readings:
Pages 392 - 401

Questions:
Page 401 #'s 1, 2, 11

Worksheet:
Complete handout on neuron