

**NERVOUS  
SYSTEM**

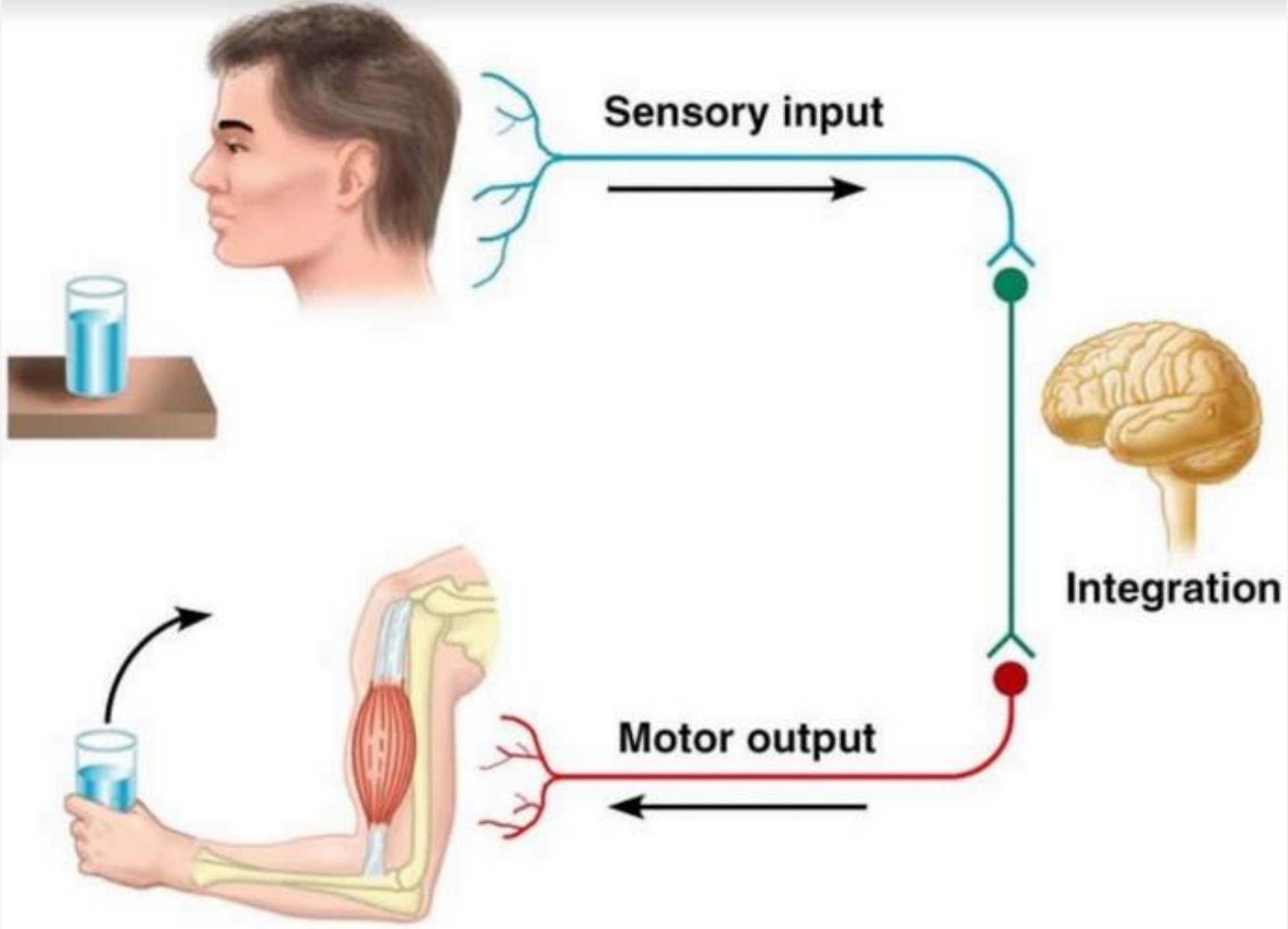


# **FUNCTIONS:**

**SENSORY** - COLLECTING  
INFORMATION FROM SENSORY  
RECEPTORS

**INTEGRATION** - PROCESSING OF  
MANY SENSORY SIGNALS

**MOTOR** - ONCE SENSORY  
INFORMATION EVALUATED, DECIDES  
ON AN ACTION



# CENTRAL NERVOUS SYSTEM (CNS)

- Coordinates incoming and outgoing information through the BRAIN and SPINAL CORD
- Takes in all sensory information
- Language, creativity, emotions, breathing



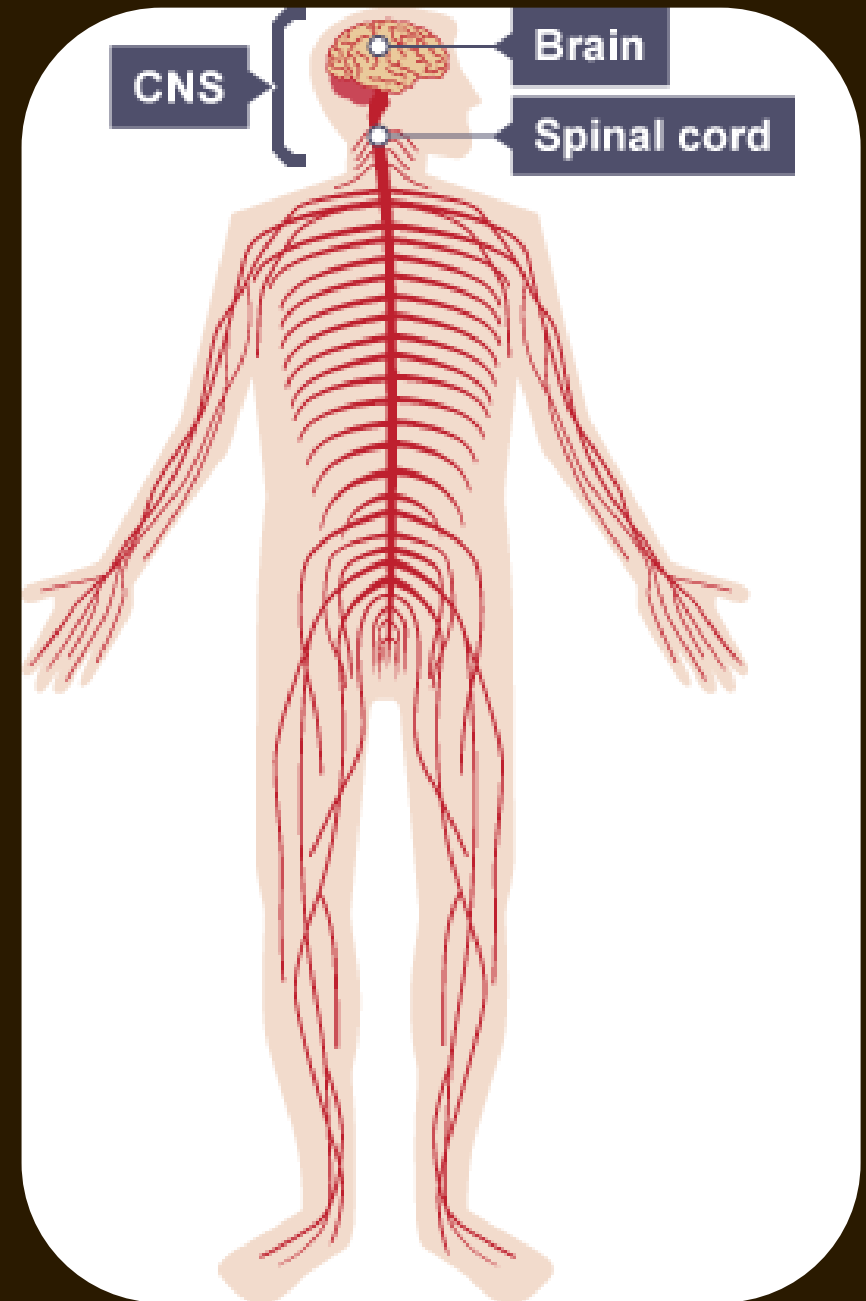
# PERIPHERAL NERVOUS SYSTEM (PNS)

Everything outside the brain and spinal cord

2 PARTS = Somatic and Autonomic

**Somatic Nervous System** –  
consciously controlled, stimulates skeletal muscles

**Autonomic Nervous System** –  
controls subconscious, visceral muscle, cardiac muscle, and glandular





# SOMATIC NERVES

# AUTONOMIC NERVES

-Voluntary control

-Involuntary control

-Maintains homeostasis (ex. digestion)

SENSORY

MOTOR

SYMPATHETIC

-Prepares body for stress

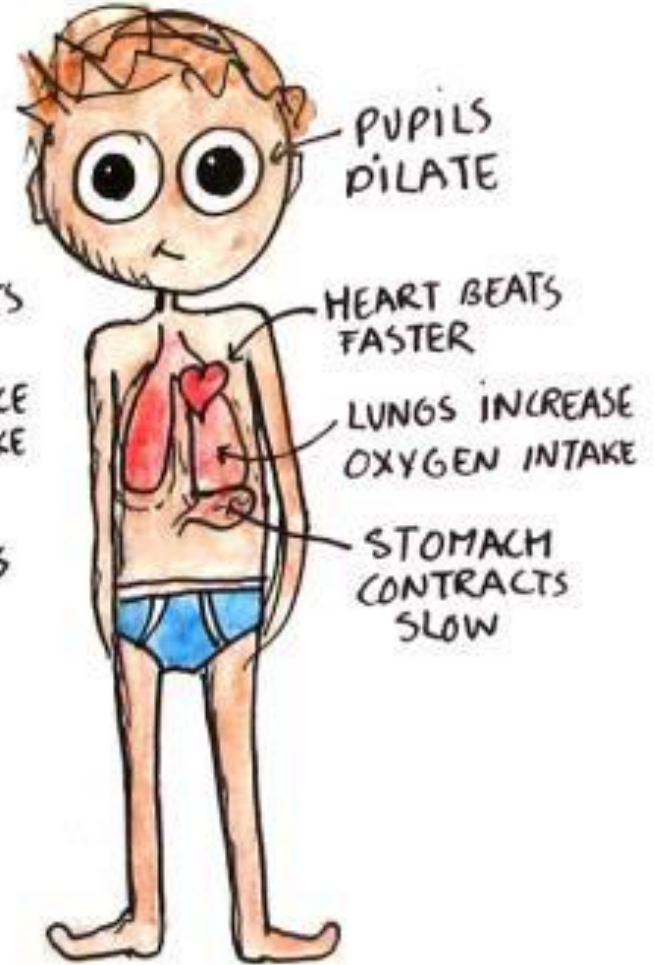
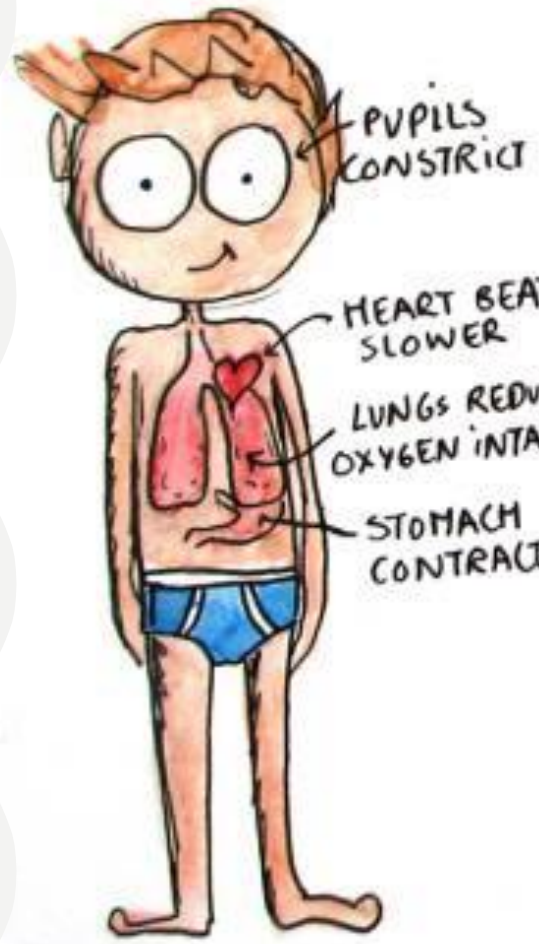
PARASYMPATHETIC

-Restores normal balance



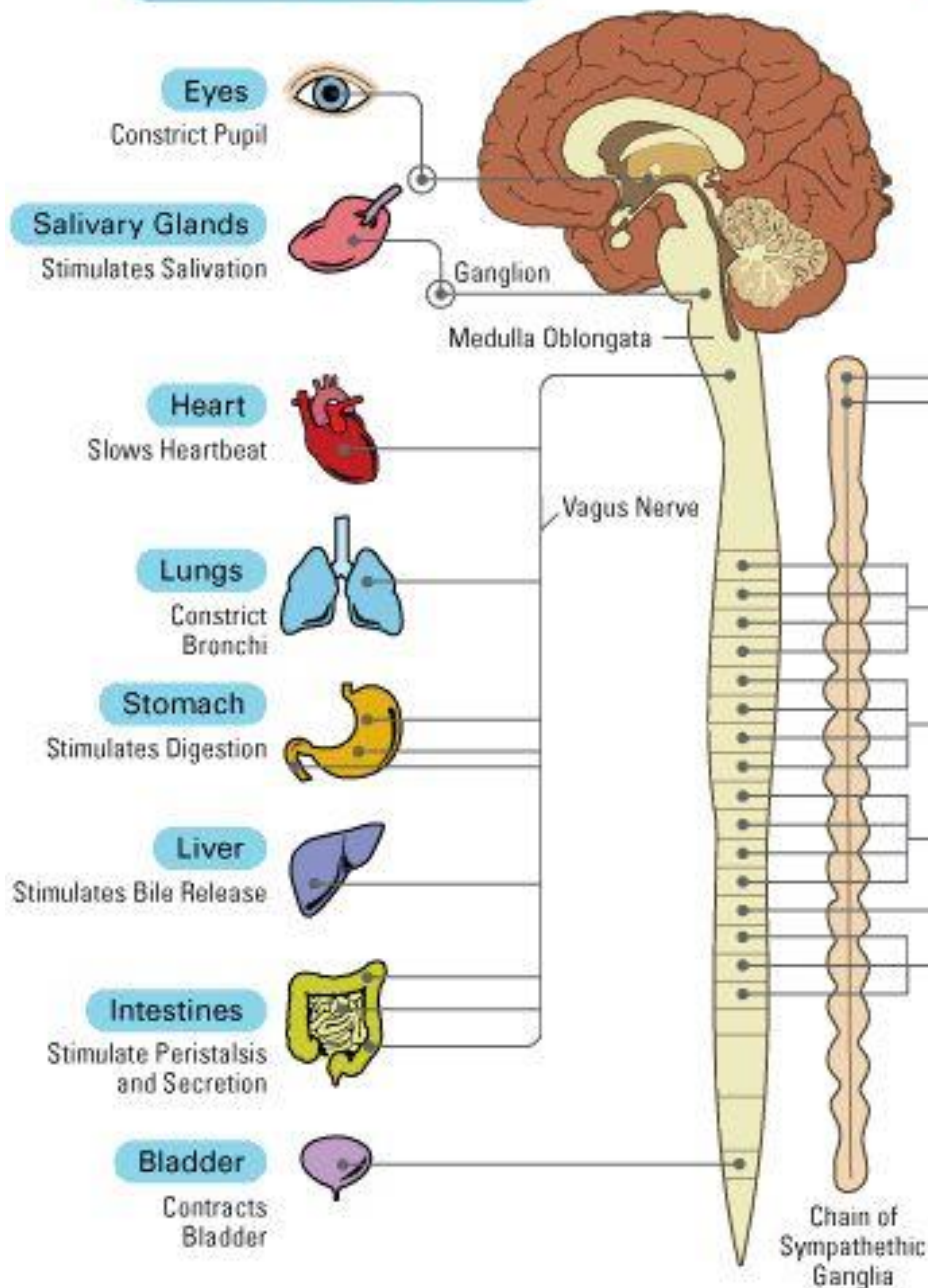
PARASYMPATHETIC SYSTEM

SYMPATHETIC SYSTEM

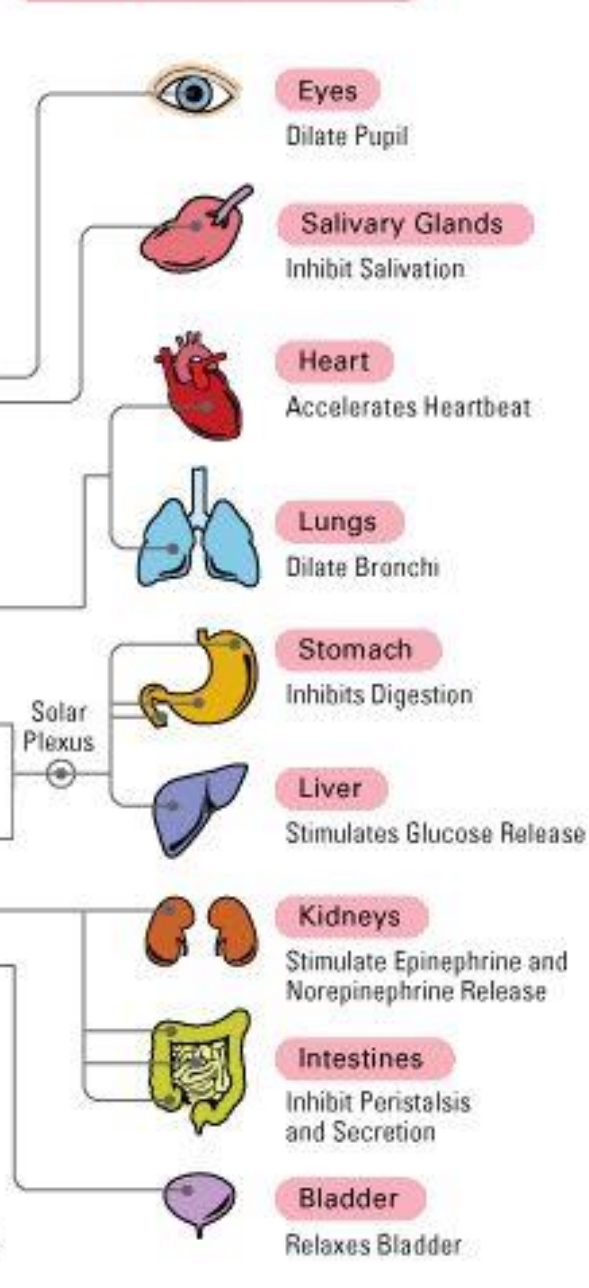


THE PARASYMPATHETIC SYSTEM IS ACTIVATED BY THE INHIBITORY NEUROTRANSMITTER ACETYLCHOLINE IN THE BRAIN. THIS SYSTEM RELAXES OUR BODY AND CALMS US DOWN. THE SYMPATHETIC SYSTEM IS ACTIVATED BY THE EXCITATORY NEUROTRANSMITTER DOPAMINE IN THE BRAIN. THIS SYSTEM IS OFTEN CALLED "FIGHT, FRIGHT, OR FLIGHT" SYSTEM.

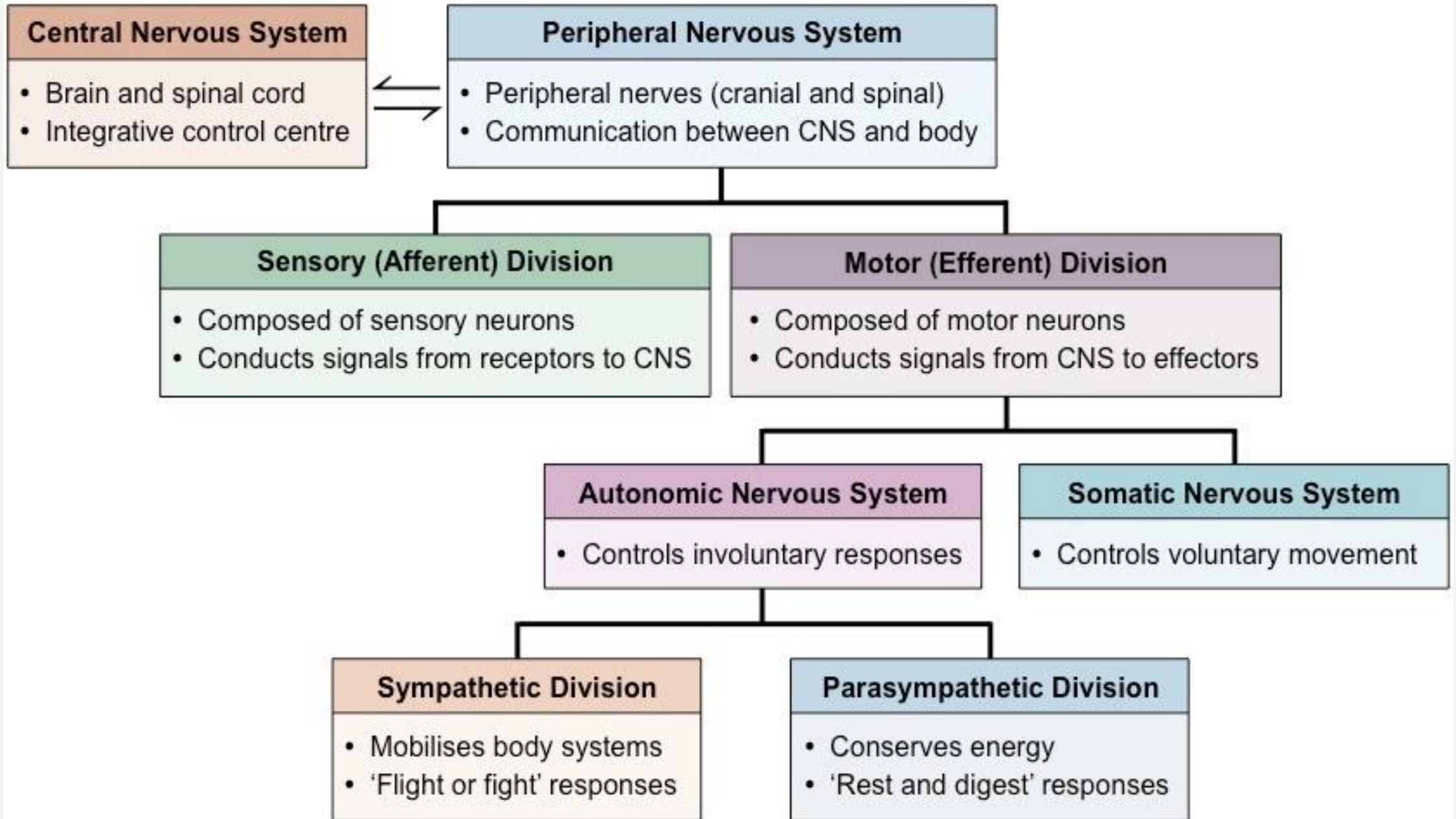
## Parasympathetic



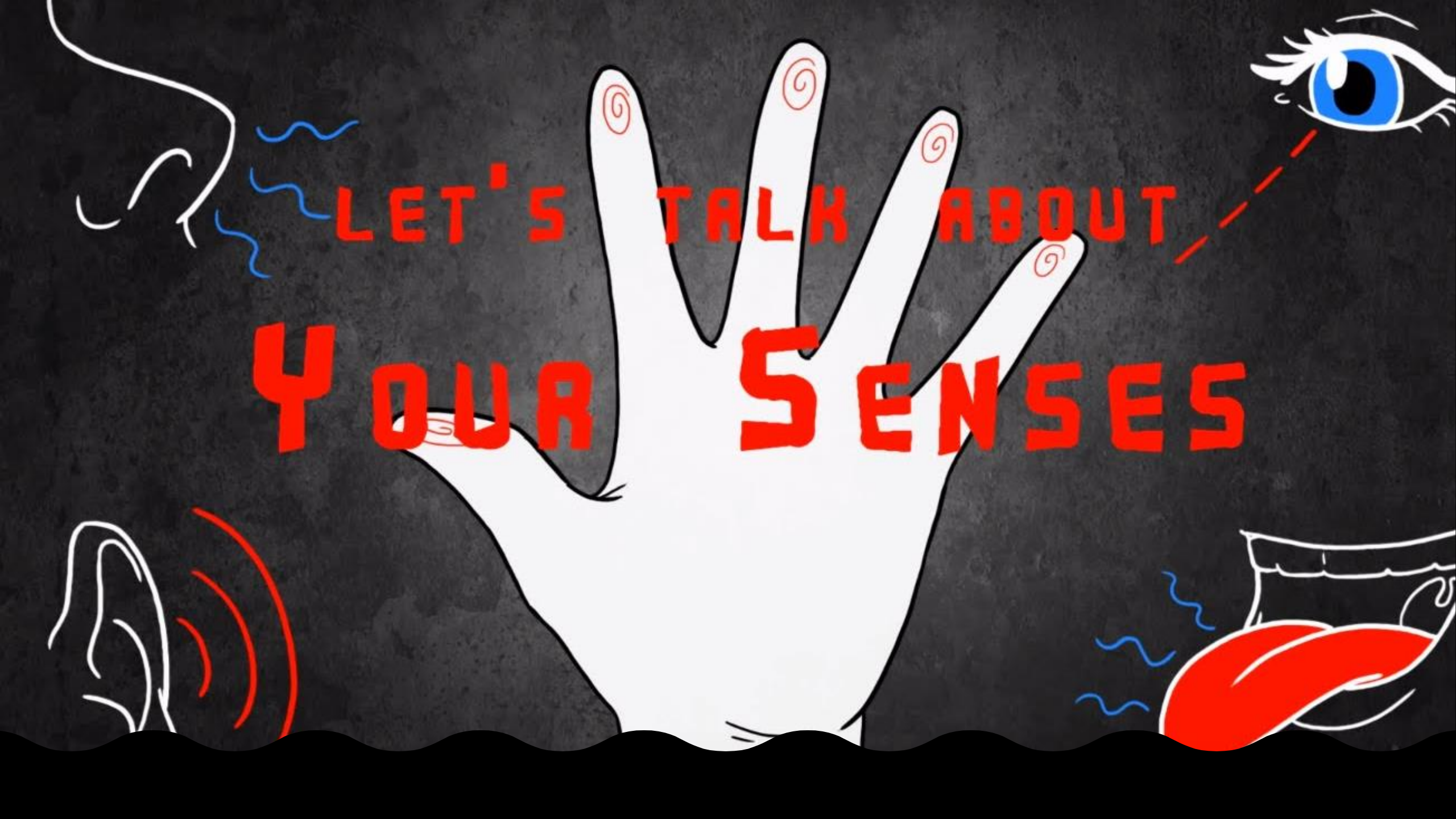
## Sympathetic

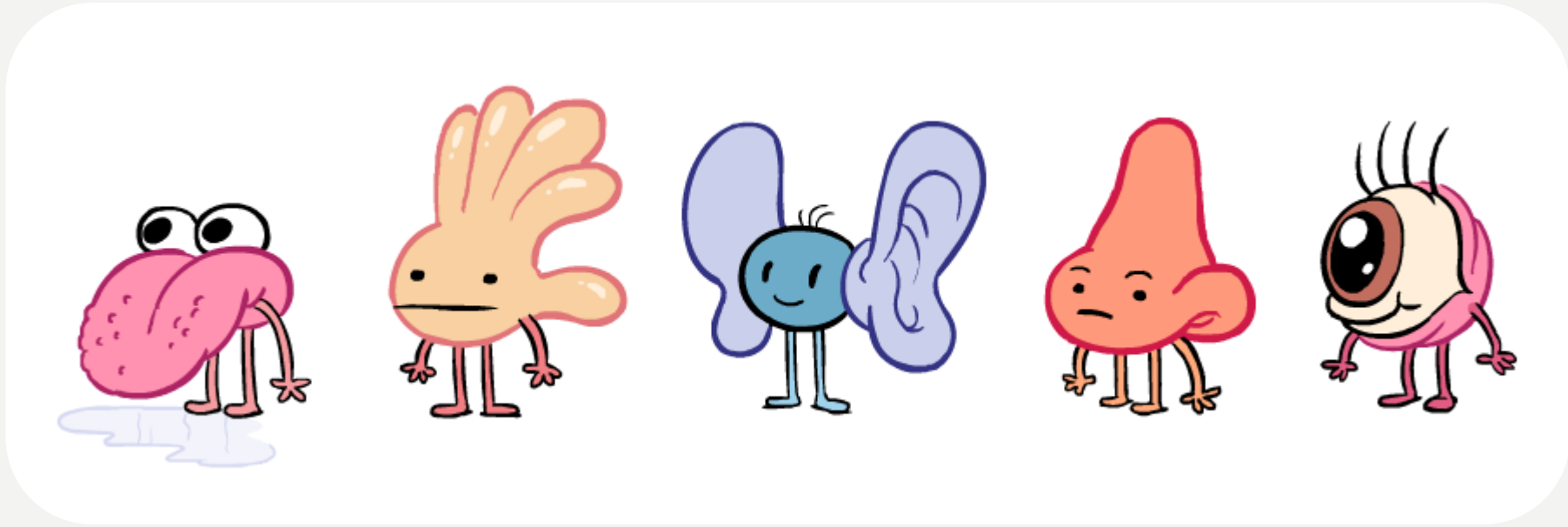






LET'S TALK ABOUT  
**YOUR 5 SENSES**





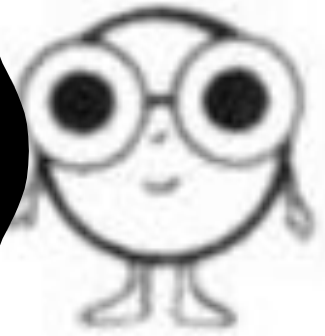
Vision, taste, smell, hearing, touch

Detected by specialized organs (ex. eyes)

Sensory receptors from the PNS send information to  
the CNS



**Visual**  
(sight)



**Olfactory**  
(smell)



**Gustatory**  
(taste)



**Vestibular**  
(balance)



**Auditory**  
(hearing)



**Tactile**  
(touch)



**Proprioception**  
(body awareness)



**YELLOW BLUE GREEN**

**RED PURPLE BLACK**

**BLUE ORANGE RED**

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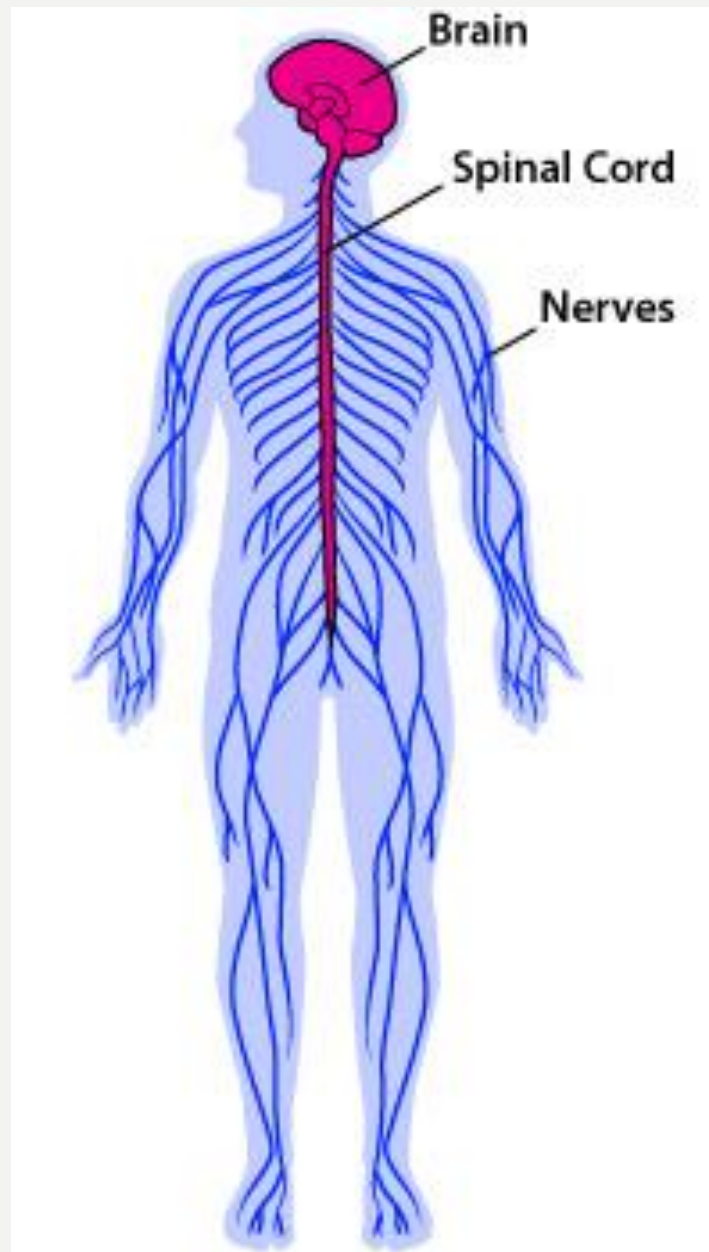












- Central Nervous System (CNS)
- Peripheral Nervous System (PNS)

