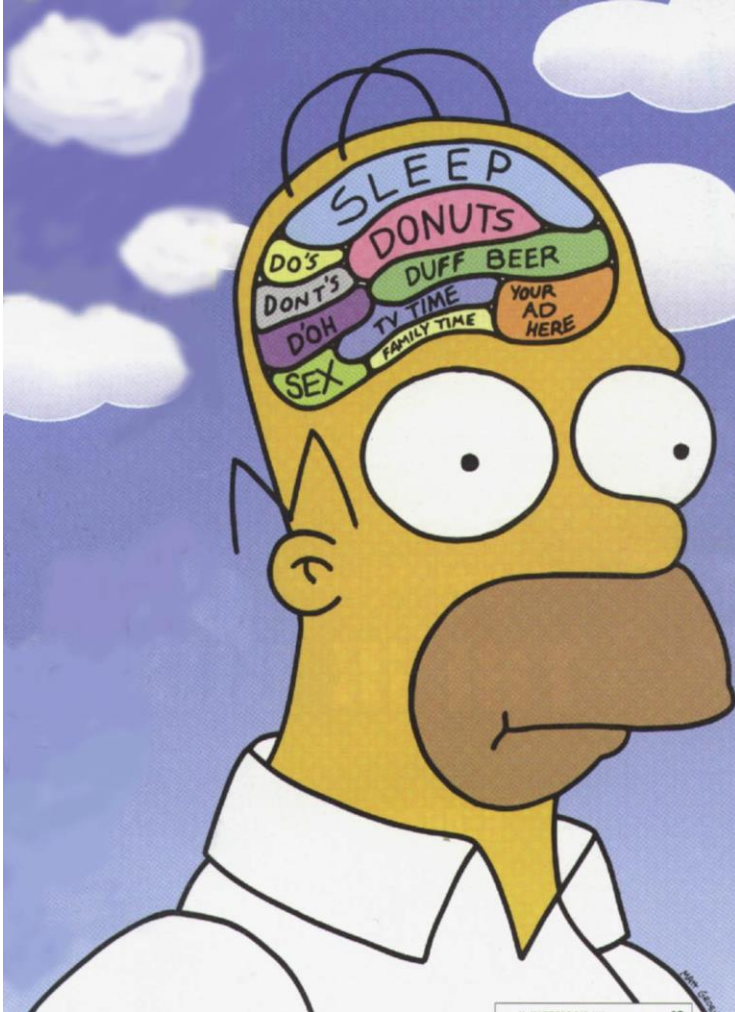


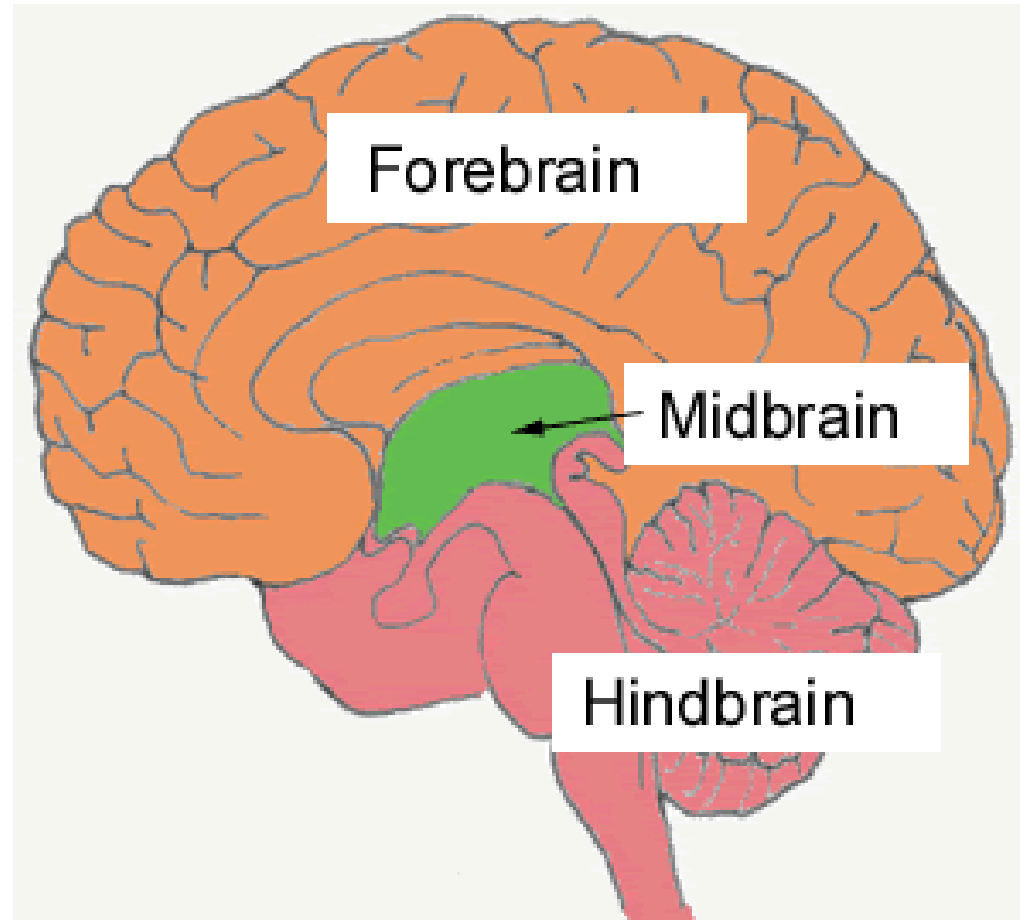
# The Brain



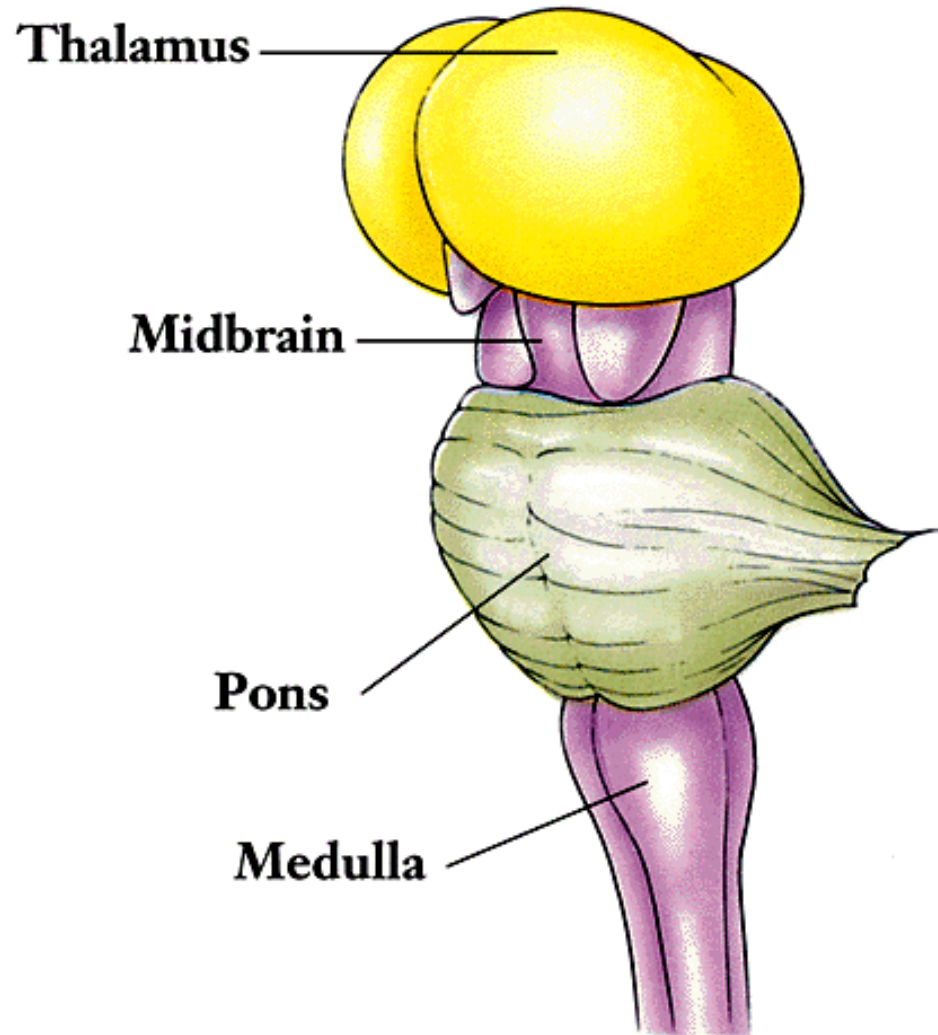
# Brain Structures



- Some scientists divide the brain up into three parts.
- Hindbrain
- Midbrain
- Forebrain

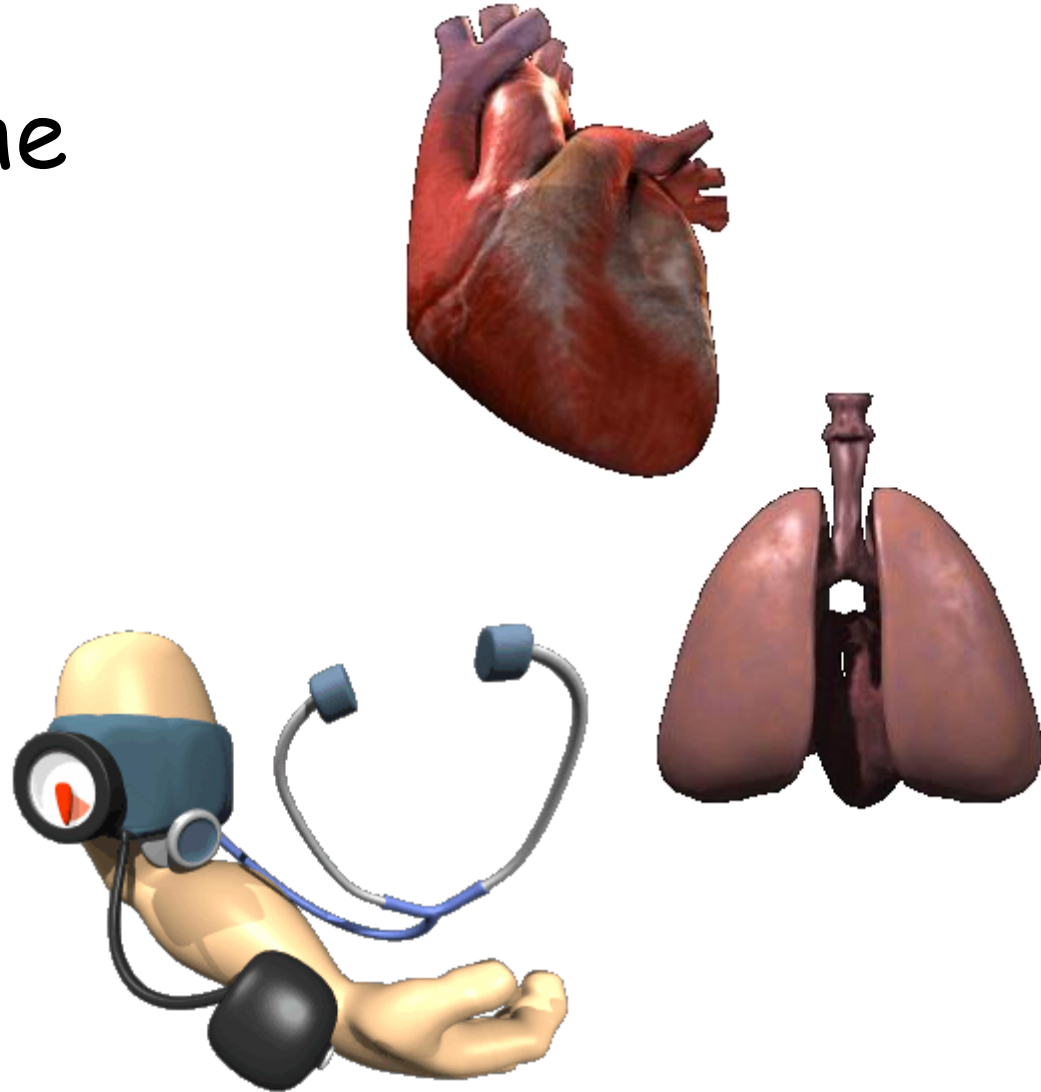


# The Brain



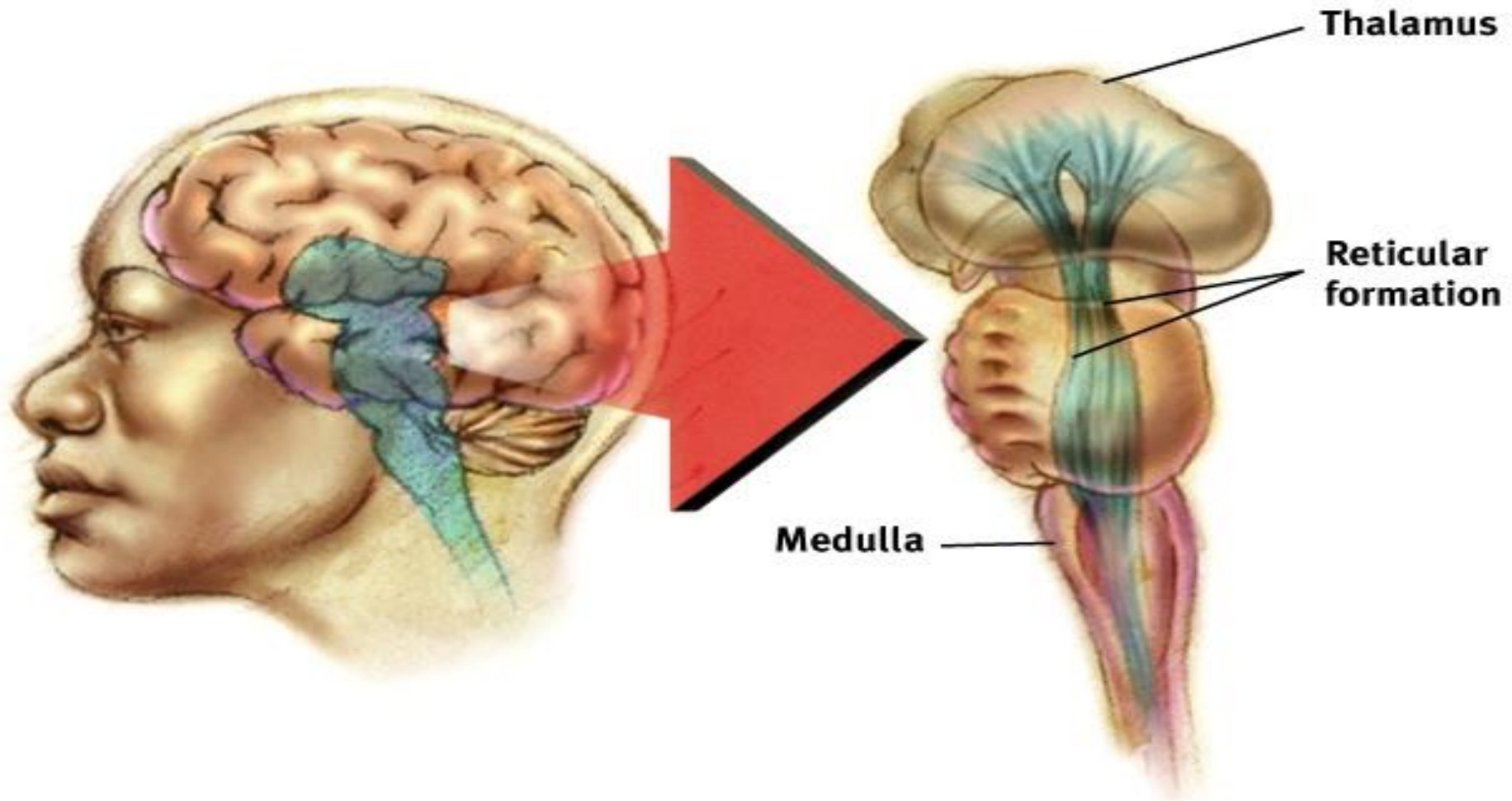
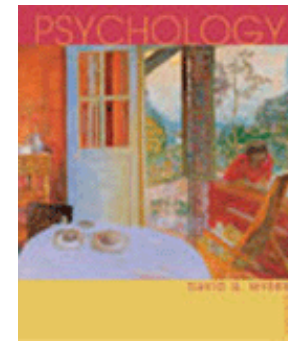
# Medulla Oblongata

- The oldest part of the brain.
- Heart rate
- Breathing
- Blood Pressure





# The Brain



# Pons

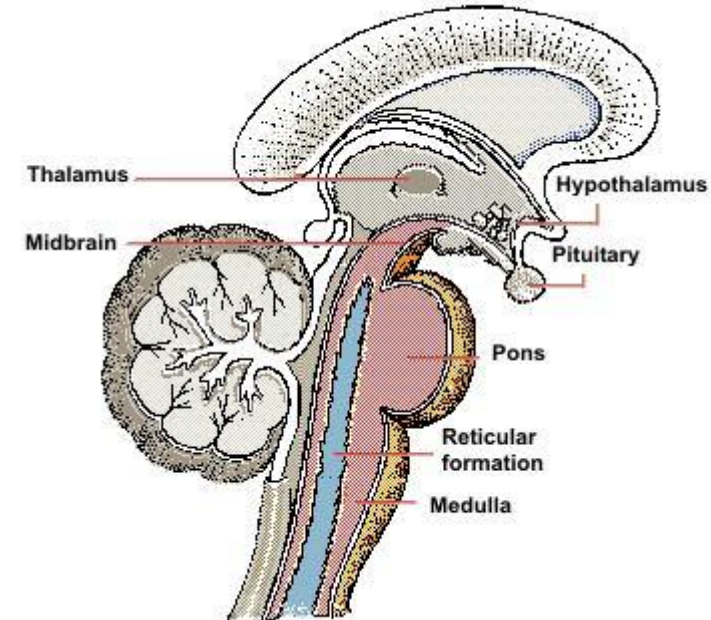


- Connects hindbrain, midbrain and forebrain together.
- Involved in facial expressions.
- Located right above medulla



# Reticular Formation

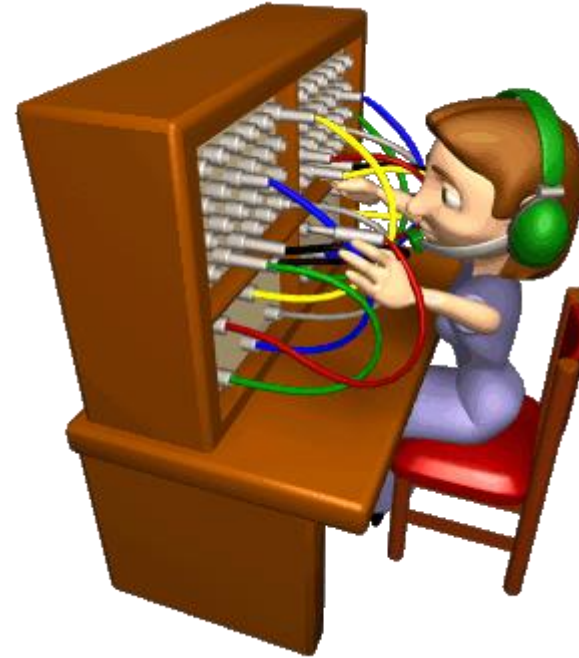
- Inside the brainstem, between your ears.
- As sensory input travels to the thalamus this net like area is filters some information and sends it to other areas of the brain.
- Involved in arousal, waking up and feeling alert.





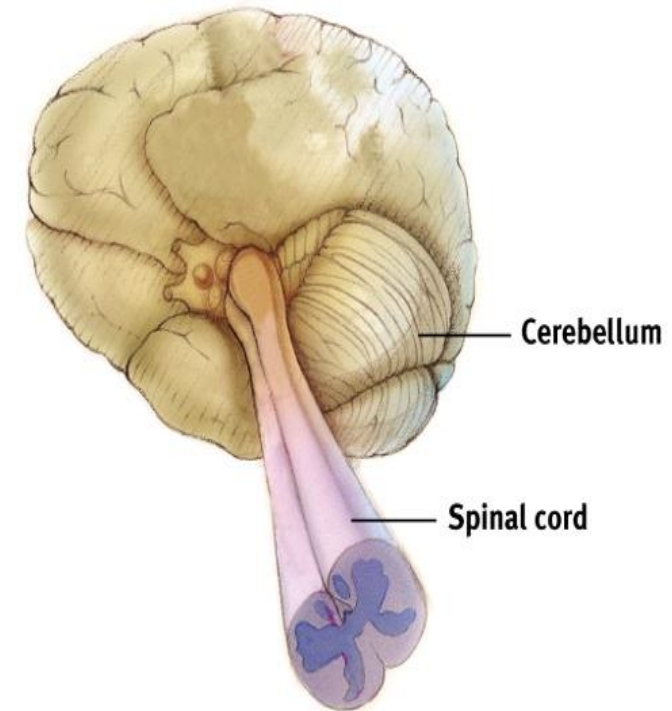
# Thalamus

- In Forebrain
- Receives sensory information and sends them to appropriate areas of forebrain.
- Like a switchboard. Think sensory input travel en-route to destination.
- Everything but smell.



# Cerebellum

- Located in the back of our head- means little brain.
- Coordinates muscle movements.
- Like kicking a soccer ball into the goal.

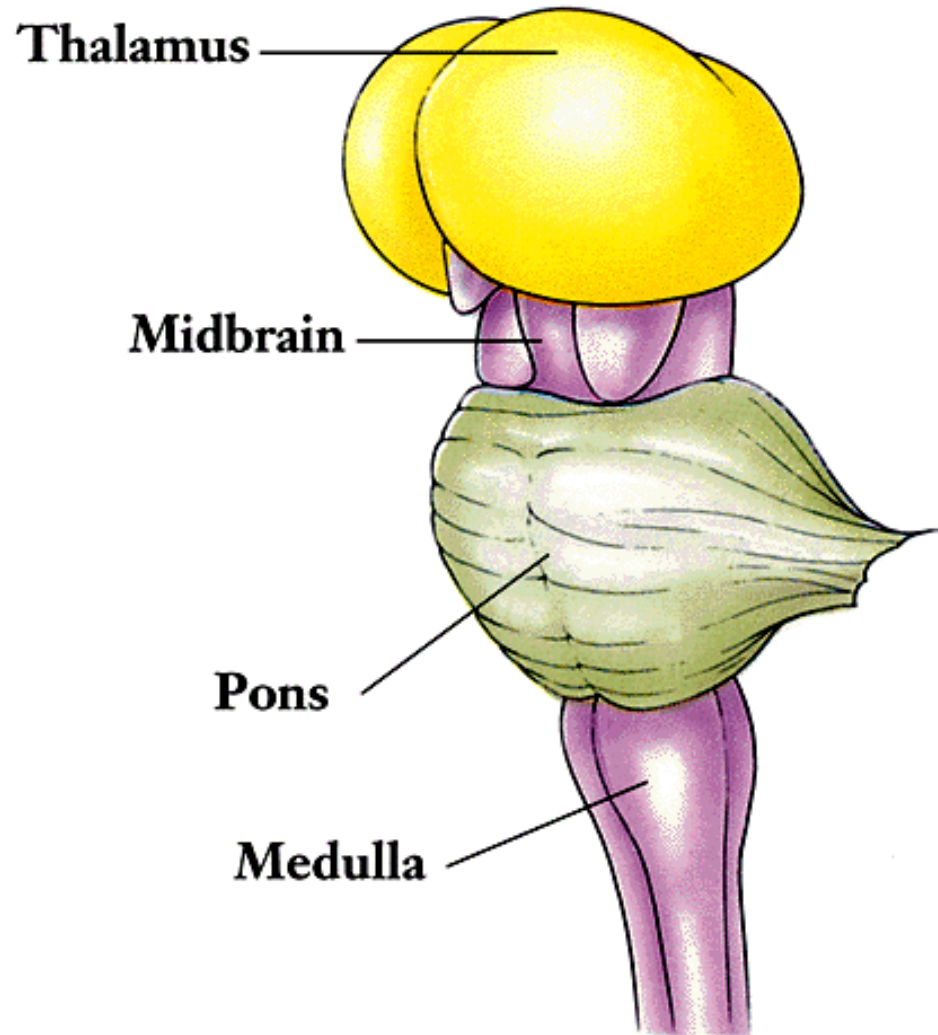


# Midbrain



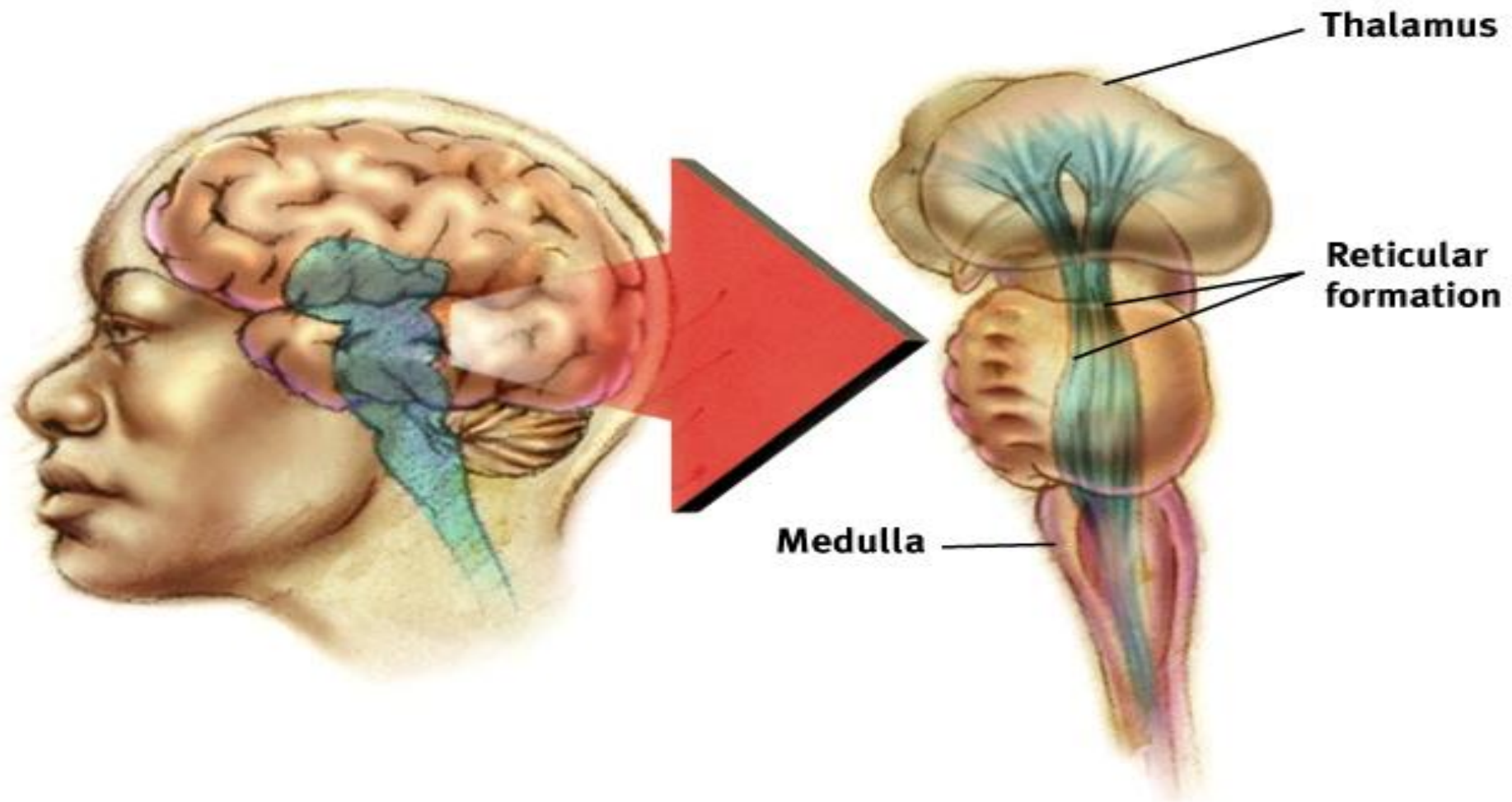
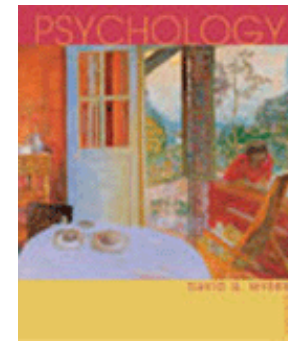
- Coordinates simple movements with sensory information.
- Contains the **reticular formation**: arousal and ability to focus attention.

# The Brain





# The Brain



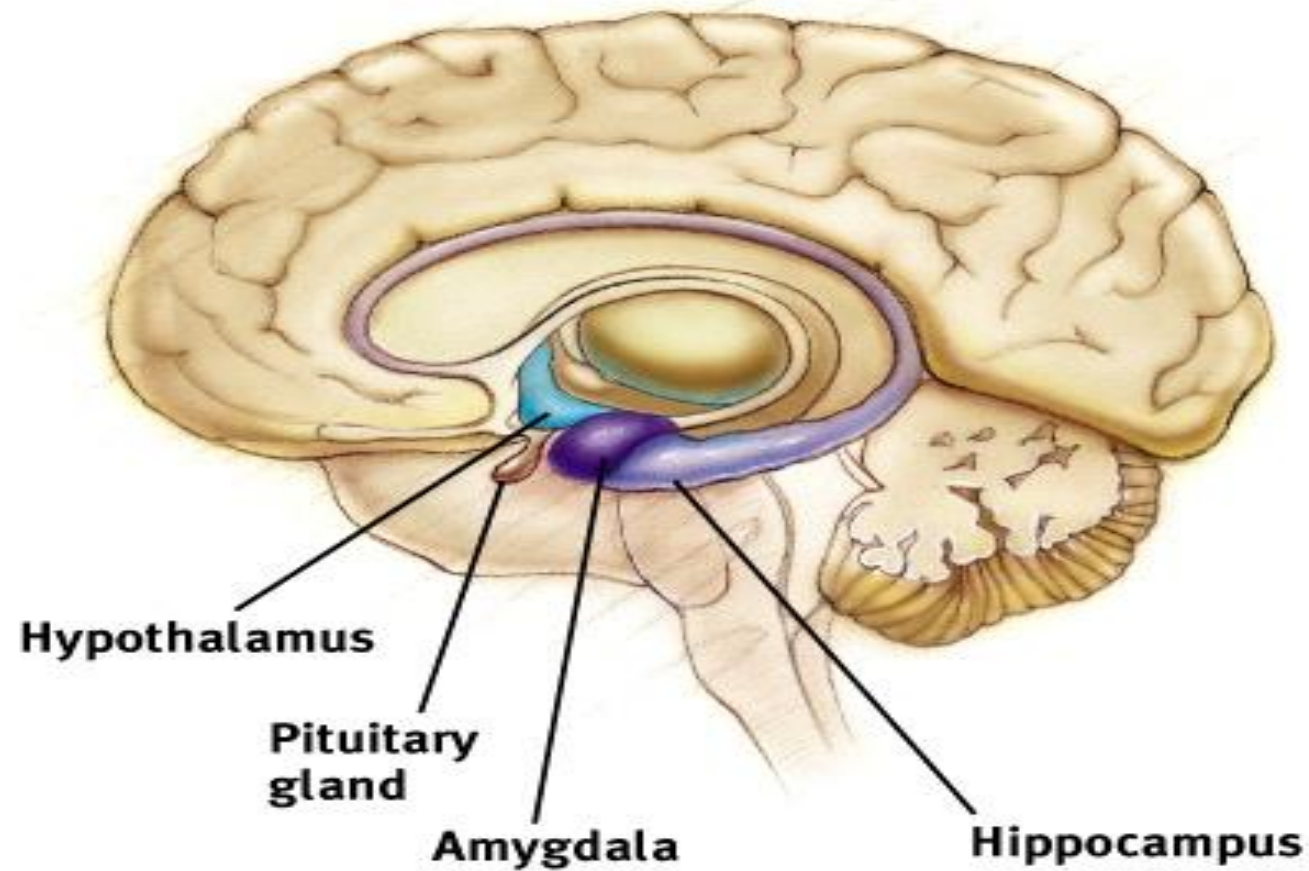
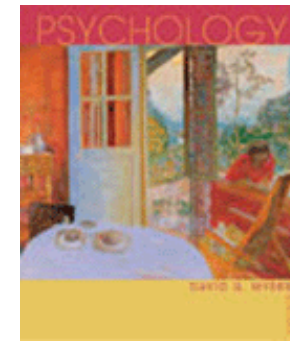


# Limbic System

- EMOTIONAL CONTROL CENTER of the brain.
- Made up of Hypothalamus, Amygdala and Hippocampus.



# The Limbic System





# Hypothalamus

- Pea sized in brain, but plays a not so pea sized role.
- Body temperature
- Hunger
- Thirst
- Lateral Hypothalamus - damage causes no appetite
- Ventromedial Hypothalamus - damage causes overeating



# Hippocampus and Amygdala

- Hippocampus is involved in memory processing.
- **Amygdala** is vital for our basic emotions. Influence aggression and fear.



**Pineal Gland:** A small gland that is located near the center of the brain. This gland secretes melatonin, and it may therefore be part of the body's sleep-regulation apparatus.