

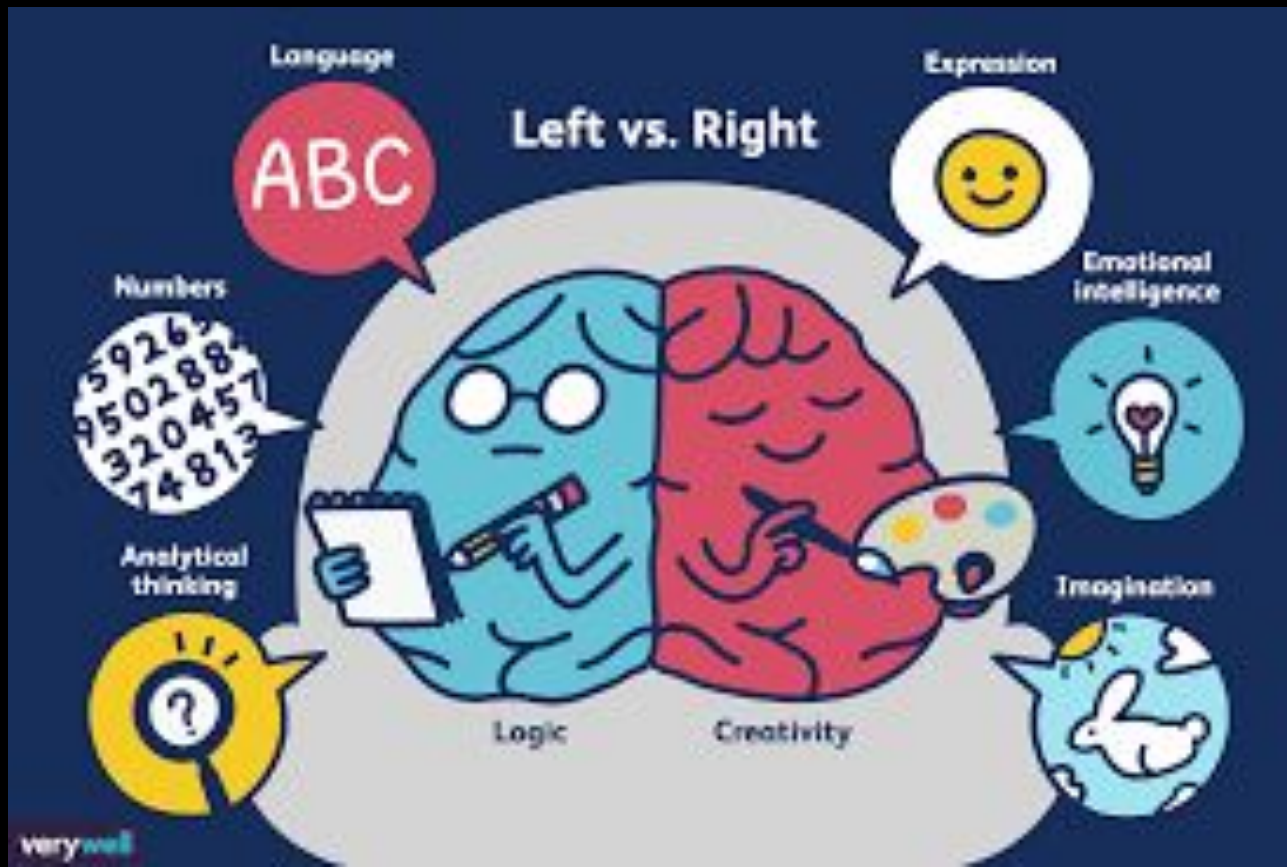
INTRO TO THE BRAIN

Localization: Cells and Lobes

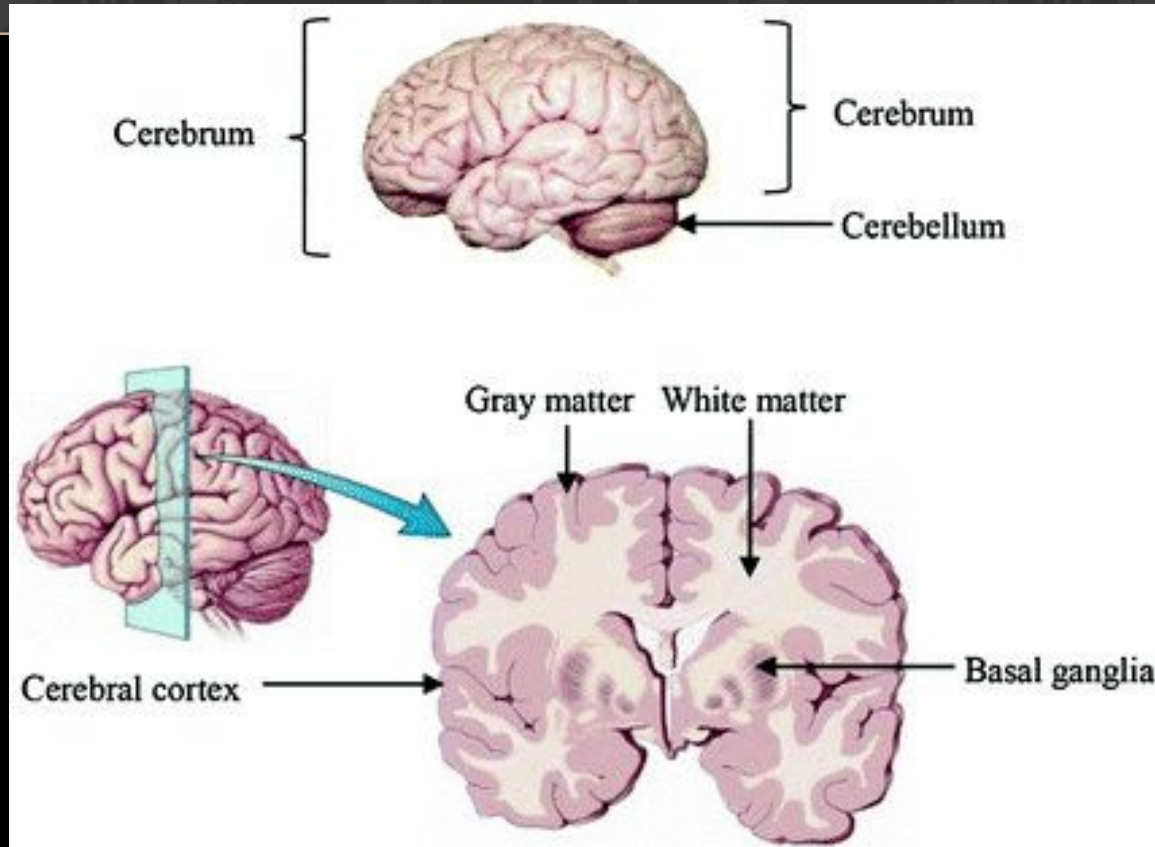


LOCALIZATION

- “Locals” are from a certain place/area
- Parts of the brain are associated with certain functions



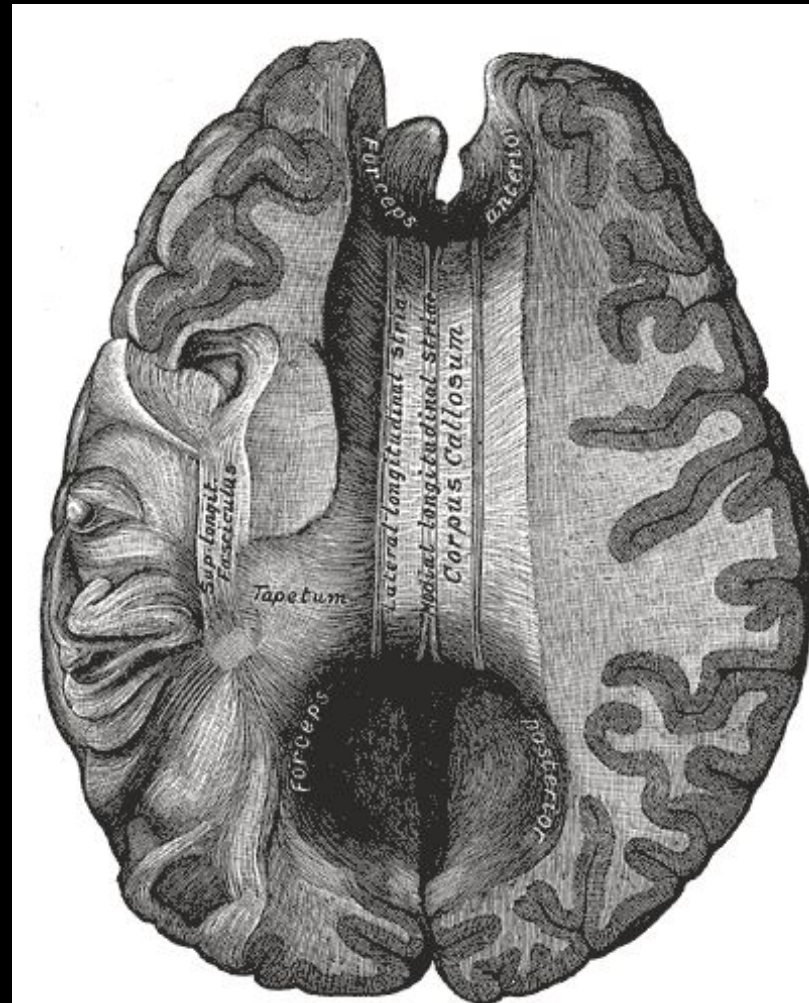
HIGHER-THINKING PROCESSES




- Cerebrum – two large hemispheres, covers upper brain
- Cerebral cortex – outer layer of cerebrum.

CORPUS CALLOSUM

Nerve fibers connecting the two hemispheres

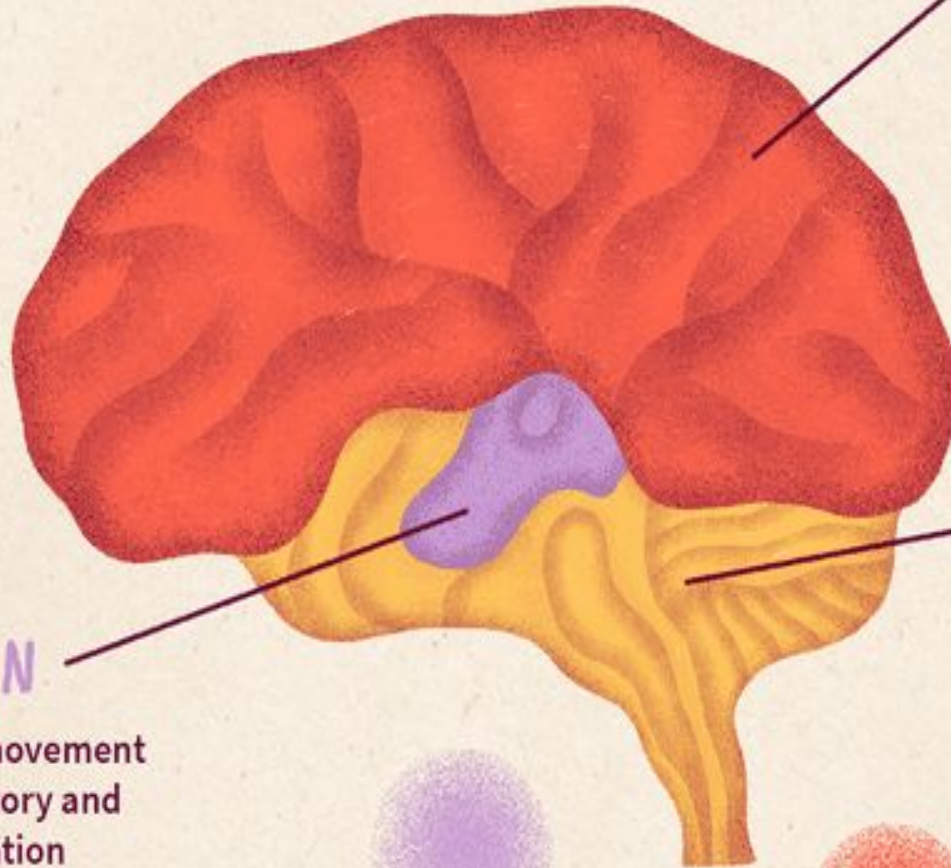




Functional Localisation in the Brain

atomi

THE MAJOR DIVISIONS OF THE BRAIN



FOREBRAIN

Processes sensory information, helps with reasoning and problem-solving, and regulates autonomic, endocrine, and motor functions

HINDBRAIN

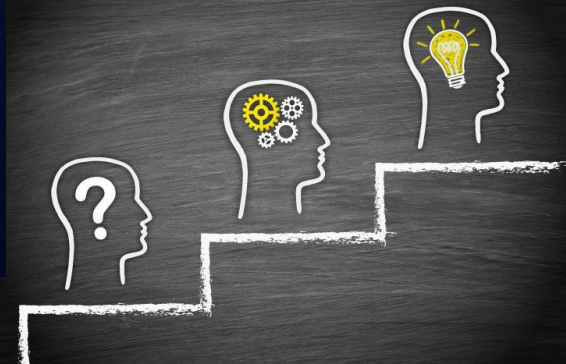
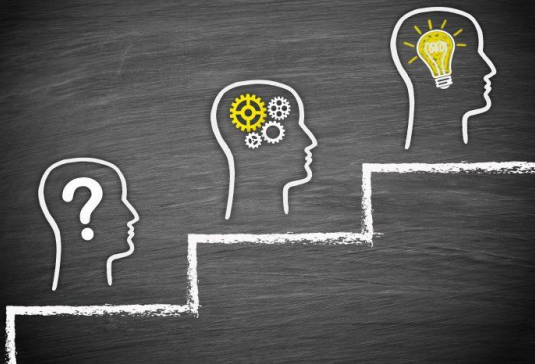
Helps to regulate autonomic functions, relay sensory information, coordinate movement, and maintain balance and equilibrium

MIDBRAIN

Helps to regulate movement and process auditory and visual information

LOBES OF THE BRAIN

**Frontal Lobes – reasoning, planning,
thinking & decision making
(does not fully develop until age 25)**



LOBES OF THE BRAIN

**Parietal Lobes – Bodily sensations
(movement, orientation and perception)**



LOBES OF THE BRAIN

Occipital Lobes – visual processing



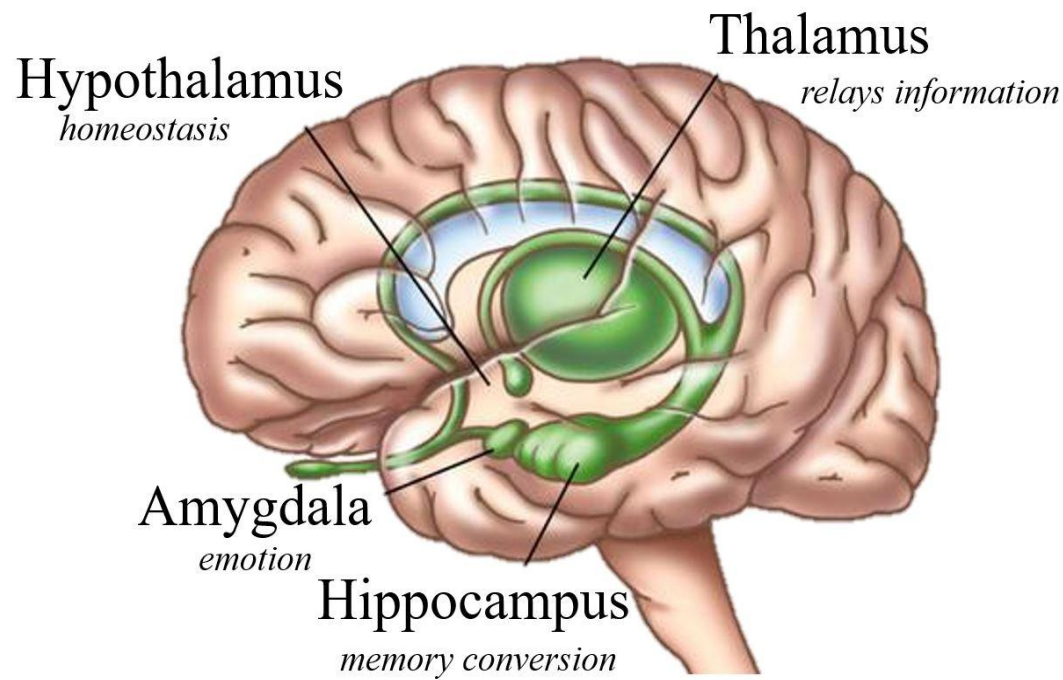
LOBES OF THE BRAIN

Temporal Lobes – hearing and memory



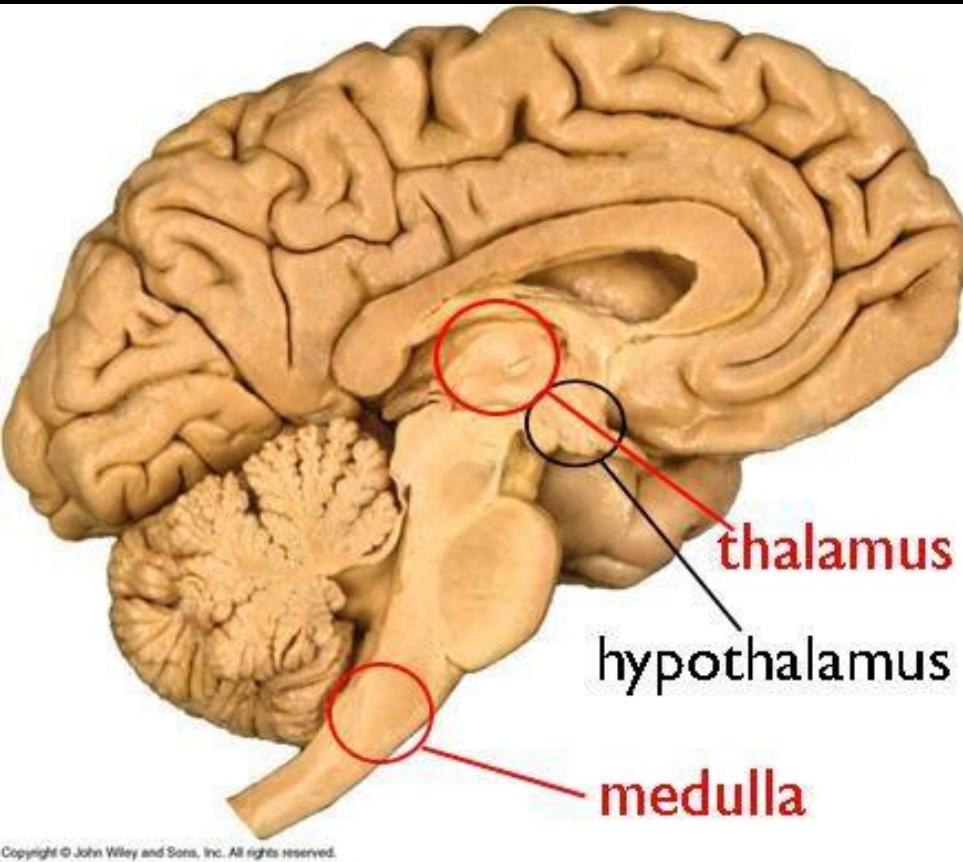
LIMBIC SYSTEM

The Limbic System



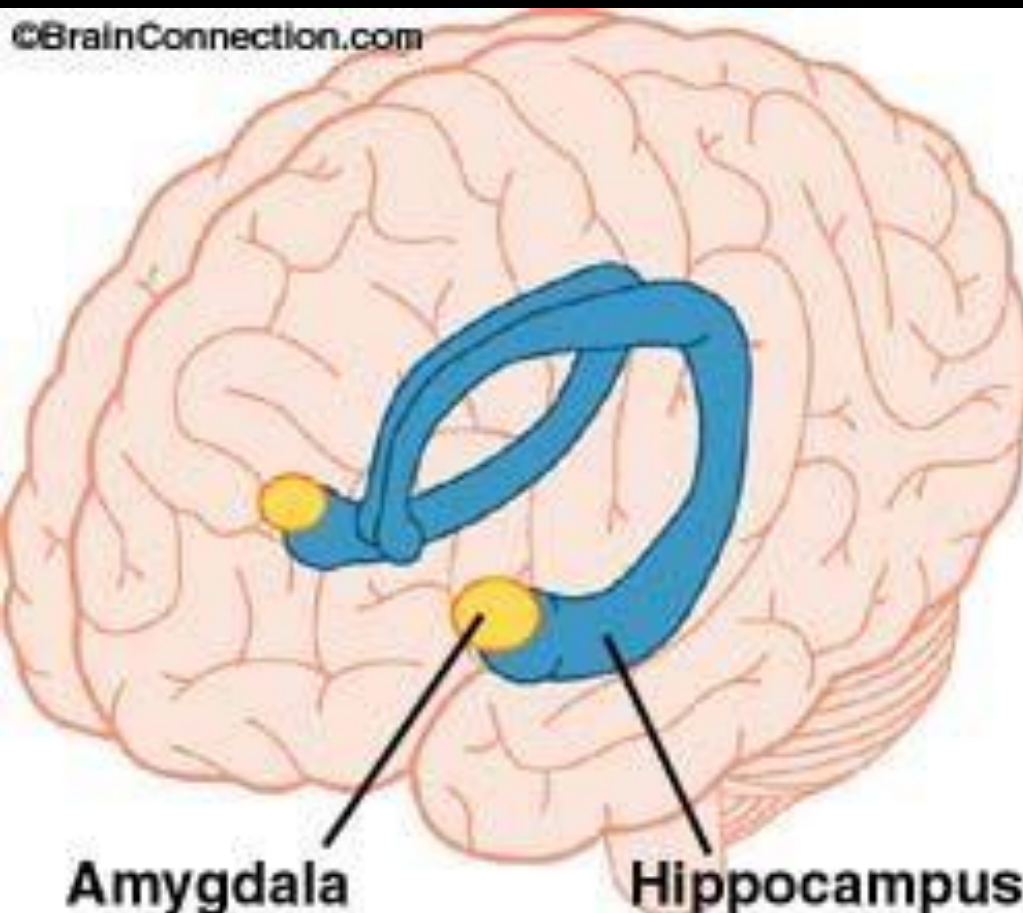
- **Evolutionary older**
- **Subcortical structure**
- **“emotional brain”**

LIMBIC SYSTEM



- Thalamus
relay, sensory functions
- Hypothalamus
emotion, thirst, hunger

LIMBIC SYSTEM



- Amygdala
emotion, fear
- Hippocampus
learning, memory,
spatial orientation

Lobe activity

1) Show behaviors associated with the 4 lobes (pg 61-70)
- each lobe should be represented

2) Options:

<u>Narrated Images</u>	<u>Short Story</u>	<u>Skit</u> Have to perform
<ul style="list-style-type: none">* 20 pts* Individual* Don't ^{just} draw the brain* Like a comic book* label lobe behavior	<ul style="list-style-type: none">* 20 pts* Individual* 1 page* Label lobe behavior in (parentheses)	<ul style="list-style-type: none">* 25 pts* 2-4 people* All 4 lobes should be demonstrated in behavior of skit