

Organization of the Brain

What is the brain ?

- Part of nervous system found in skull
- Surrounded and supported by salty fluid (CSF)

What does the brain do?

- EVERYTHING

How is the brain studied?

1. Case Study: Natural Experiment
 2. Lesion: Experimental disruption of brain
 3. Stimulation: Experimental activation of brain. Penfield Studies
 4. Brain Recordings: Electrodes measure activity
 5. Imaging Techniques
- CAT: Computerized Axial Tomography
 - PET SCAN: Positron Emission Tomography
 - MRI: Magnetic Resonance Imaging

How is the Brain Organized?

1. Forebrain: Largest Part; Complex Processing
2. Midbrain: Relays for sight and vision
3. Hindbrain: Control of Vital Functions, sleep, wakefulness, attention, motor co-ordination

The Cerebral Cortex

- outer surface of cerebrum
- Convoluted
- contains 75% of our neurons
- divided into two symmetrical hemispheres
- each hemisphere controls opposite side of body

How is the cortex organized?

- divided into 4 lobes, based on gyri(ridges) and sulci(valleys)
 1. **FRONTAL**: in front of central Sulcus
 2. **PARIETAL**: behind central sulcus; above sylvian fissure
 3. **OCCIPITAL**: Back of Head
 4. **TEMPORAL**: Under Sylvian Fissure