

Brain Division

Coverings

Cranial Meninges

outer: dura matter

Divides Brain

falx cerebri

falx cerebelli

tentorium cerebelli

arachnoid matter

inner: pia matter

Cerebellum

Each Hemisphere (2)

Connected by Vermis

Function

Movement Coordination and Balance

Problems

Ataxia

Cerebrum

Each Hemisphere (2)

Frontal Lobe

Character

Logic

Learning

Motor Area

Broca's Speech Area (Motor aspect)

Temporal Lobe

Intelligence

Memory

New Learning

Storage

Old and Recent Events

Speech (Cognitive Aspect)

Parietal Lobe

Visual Spacial

Music / Art

Integrates impulses

Occipital Lobe

Vision Area

Connected by Corpus Callosum

Outer structure

Gyrus / Convolutions

fold

Sulcus

grooves between folds

Fissure

deepest grooves

General

ipsilateral control (opposite side)

Motor

Sensory

20% at rest consumption of glucose and Oxygen

Blood-Brain Barrier

Areas of Control

Left

- Sensory / Motore
- Reasoning
- Numeric and Scientific skills
- Spoken / Written Language
- Ability to understand sign language

Right

- Sensory / Motor
- Art / Music
- Space and Patter Perception
- Face / Emotional recognition
- Emotional aspect of language
- Odor differentiation

Brain Stem

Midbrain

Pons

- Integration
- Face and Eye nerve source

Medulla Oblongata

- Autonervous system

Diencephalon

Epithalmus

- Integration Area

Thalamus

- Relay station of senses
- Pain

Hypothalmus

- Temperature regulation
- Sleep
- Appetite

Pineal Gland