

Characteristics of the Lobes of the Brain

(revised 4-2006)

Pre-Frontal / Frontal Lobe	Parietal Lobe	Temporal Lobe	Occipital Lobe
Location: Front of brain	Location: Top midsection of the brain	Location: Over the temples	Location: Back of brain
Higher Intellectual Functions – CEO	The right side affects left-side motor function, including: strength, coordination, and sensation.	The right side is responsible for perceptual skills, such as: spatial relationships and visual organization.	This is the primary visual area where the brain receives the visual “picture” from the eyes and interprets it.
Planning; Anticipation	The left side affects right-side motor function.	The left side controls expressive language and is called Wernicke’s area.	Processes visual input from the retina.
Personality; Emotions; Ability to feel and express emotions	Fine motor movement	Although memory is a function of the brain as a whole, <u>memory</u> is strongly language based.	Brings the visual world to conscious perception.
Learning from experience; Awareness of abilities/limitations	Precise muscle-moving signals	Understanding and processing language, music.	
Reasoning; Problem solving	Initiating and sequencing movements	Emotional stability; Social skills, recognizing facial expressions, and vocal intonation	
Self-monitoring and supervision	Logic and spatial reasoning	Aggression; Violent thoughts	
Organizing thoughts; Organization	Sense of Touch	Hearing	
Anticipating consequences	Differentiation: Size, Shape, Color	Paranoia	
Judgment	Spatial and Visual Perception	Complex memories	
Attention span; Concentration		Retrieval of words	
Perseverance		Reading difficulties	
Critical and forward thinking; Mental flexibility		Auditory processing	
Expressive Language/Speaking		Organization and sequencing	
Empathy		Anxiety	
Mediating emotions		Confusion	
Inhibition; Impulse control		Seizures	
Area designated for language comprehension called the Broca’s area is contained within the left frontal lobe hemisphere.		Abnormal sensory perceptions	