

Cerebral hemisphere lobes done by Munerah alOmari

	Frontal	Parietal	Occipital	Temporal
Function	Motor function, motivation, aggression, smell, mood.	Reception and Evaluation Of sensory information	Visual processing	Smell, hearing, memory, abstract thought
Gyrus	Precentral gyrus.	Postcentral gyrus.	-	-
Sulcus	Superior & inferior frontal sulci divide the lobe into: superior Middle inferior frontal gyri.	Intraparietal sulcus divide the Lobe into: superior & inferior parietal lobules.	-	Superior & inferior Temporal sulci giving rise to :superior middle inferior temporal gyri.
Functional areas:	<p>Premotor cortex: Located in the region immediately anterior to the precentral gyrus (Brodmann's area 6).</p> <p>Prefrontal cortex: Extensive region of the frontal lobe anterior to premotor area.</p> <p>Broca's (motor speech) area: Located in the inferior frontal gyrus of the dominant hemisphere, usually left (Brodmann's area 44 & 45).</p> <p>Frontal eye field: Located in the middle frontal gyrus immediately in front of premotor cortex (Brodmann's area 8).</p> <p>Primary motor cortex: Located in precentral gyrus (Brodmann area 4).</p>	<p>Primary somatosensory cortex: located in postcentral gyrus (Brodmann's area 1, 2, 3).</p> <p>Parietal association cortex: located posterior to primary somatosensory cortex.</p>	<p>Primary visual cortex: located on the medial surface of the hemisphere, in the gyri surrounding the calcarine sulcus (Brodmann's area 17).</p> <p>Visual association cortex: located around the primary visual cortex.</p>	<p>Primary auditory cortex: located in the superior surface of the superior temporal gyrus (Brodmann's area 41, 42)</p> <p>Auditory association cortex: located immediately around the primary auditory cortex (also includes Wernicke's area)</p> <p>Parahippocampal gyrus: located in the inferomedial part of temporal lobe. Deep to this gyrus lies the hippocampus and the amygdala, which are parts of limbic system</p>
Lesions	1-paralysis on opposite side of the body , 2-Broca's Aphasia: Results in the ability to comprehend speech, but the decreased motor ability (or inability) to speak and form words if lesion involves Broca's area in the dominant hemisphere	Parietal lobe is essential for our feeling of touch, warmth/heat, cold, pain , body position and appreciation of shapes of palpated objects . When damaged , the person loses the ability to recognize shapes of complex objects by palpation (palpation = examinations of objects by touch) & develops Sensory Inattention on opposite side.	Lesions in the parietal-temporal -occipital association area are associated with color agnosia, movement agnosia and agraphia. Damage to the primary visual cortex, can cause blindness due to the holes in the visual map on the surface of the visual cortex that resulted from the lesions.	may lead to memory impairment can be associated with temporal lobe epilepsy -Wernicke's Aphasia Language comprehension is inhibited. Words and sentences are not clearly understood, and sentence formation may be inhibited or nonsensical.

