

# #DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

SULCI OF THE BRAIN





# **#DIBSBYNEXTILLO**

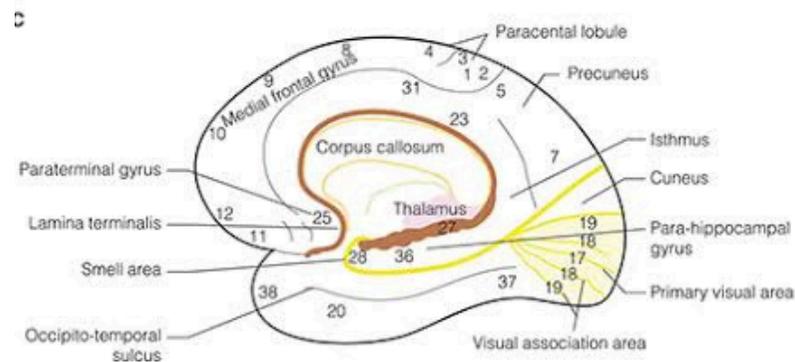
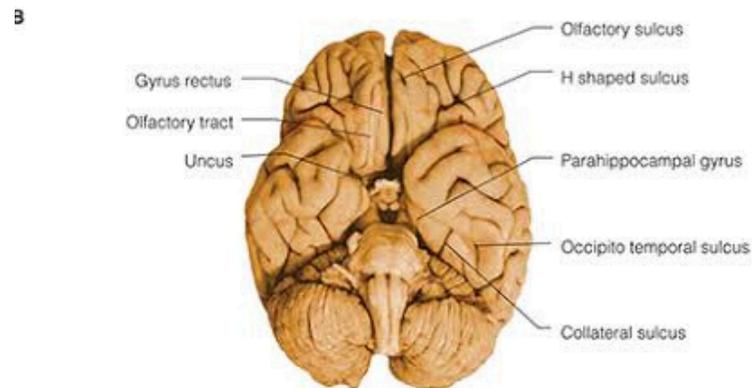
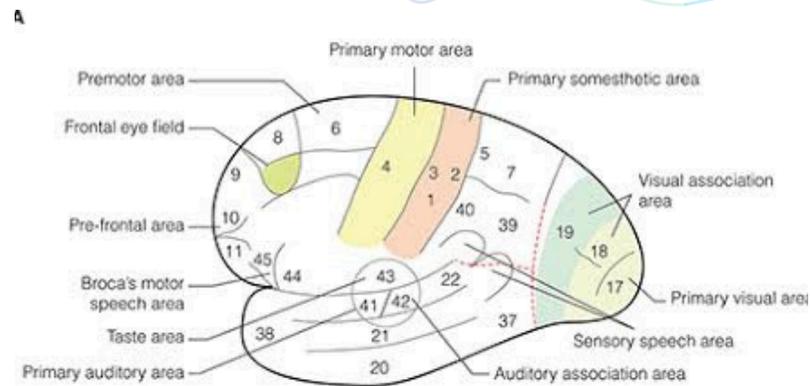
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## **SULCI OF THE BRAIN**

The intricate pattern of sulci in the brain contributes significantly to its anatomical organization. Understanding these sulci aids in deciphering the brain's complex structure and functions.



# VISUAL REPRESENTATION





# TYPES OF SULCI

- **Primary Sulci:** Define major lobes (e.g., frontal, parietal, temporal, occipital). Examples include the central sulcus, separating frontal and parietal lobes, and the lateral sulcus, delineating temporal lobe.
- **Secondary Sulci:** Subdivide lobes into smaller functional regions. Examples include the precentral sulcus, which precedes the primary motor cortex, and the postcentral sulcus, posterior to the primary somatosensory cortex.
- **Tertiary Sulci:** Smaller sulci within specific functional areas. Examples encompass gyri like the superior frontal gyrus,



# FUNCTIONAL SIGNIFICANCE

- ***Lateral Sulcus (Sylvian Fissure):***
- ***Crucial for language processing and houses auditory regions.***
- ***Superior Temporal Sulcus: Involved in higher-order auditory processing and social cognition.***
- ***Motor Planning and Coordination Sulcus:***
- ***Precentral Sulcus: Borders the primary motor cortex, crucial for motor planning and execution. Visual and Spatial Processing Sulci:***



# MEDIAL AND INFERIOR SULCI

- **Medial Sulci:**
- **Cingulate Sulcus:** Located on the medial surface, associated with emotional processing and memory.
- **Paracingulate Sulcus:** Adjacent to the cingulate sulcus, involved in cognitive functions.
- **Inferior Sulci: Collateral Sulcus:**
- **Found on the inferior surface, associated with visual memory and object recognition.**
- **Lingual Sulcus:** Adjacent to the collateral sulcus, implicated in visual processing.



# MCQ

## **QUESTION**

***Which sensory modality is primarily associated with the Superior Temporal Sulcus?***

***Auditory Processing***

***Visual Memory***

***Motor Planning***

***Language Comprehension***

***ANSWER: Auditory Processing***

