

Parts Of The Brain Flashcards

Cerebrum & Cortex

Q	A
What is the cerebrum?	The largest brain structure responsible for higher cognition, voluntary movement, perception, and complex processing.
What is the cerebral cortex?	The thin outer layer of grey matter covering the cerebrum, responsible for complex functions.
How are hemispheres organised?	The right hemisphere controls the left side of the body and vice versa.
What functions are associated with the cortex?	Perception, memory, language, voluntary movement, reasoning.
What is cortical lateralisation?	Specialisation of function between the left and right hemispheres.

Frontal Lobe

Q	A
What does the prefrontal cortex control?	Executive function, working memory, decision-making, personality, impulse control.
What is the primary motor cortex?	Region in the precentral gyrus responsible for voluntary movement.
What is the supplementary motor area?	Involved in planning complex and bilateral movements.
What is the premotor cortex?	Plans and sequences movements.
What is Broca's area responsible for?	Speech production.
What happens if Broca's area is damaged?	Expressive aphasia (difficulty producing speech).

Parietal, Occipital, Temporal Lobes

Q	A
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What is the postcentral gyrus?	Primary somatosensory cortex responsible for processing touch and bodily sensations.
What does the superior parietal lobule do?	Spatial processing and guiding movement.
What does the inferior parietal lobule do?	Language processing, reading, arithmetic.
What is the occipital lobe responsible for?	Visual processing.
What is the superior temporal gyrus?	Primary auditory cortex.
What does the middle temporal gyrus process?	Language and semantic processing.
What does the inferior temporal gyrus do?	Visual recognition and object processing.
What happens if Wernicke's area is damaged?	Receptive aphasia (impaired language comprehension).

Brainstem & Cerebellum

Q	A
What structures make up the brainstem?	Midbrain, pons, medulla.
What is the midbrain responsible for?	Visual and auditory processing, motor control, sleep, arousal.

What are the colliculi?	Structures involved in eye movements and auditory relays.
What is the tegmentum?	Involved in motor control and attention.
What are cerebral peduncles?	Motor pathways connecting cortex to brainstem.
What is the substantia nigra?	Dopamine-producing region involved in motor control.
What does the pons do?	Relays signals between cortex and cerebellum; cranial nerve functions.
What does the medulla regulate?	Autonomic functions like breathing, heart rate, blood pressure.
What does the cerebellum coordinate?	Voluntary movement, balance, fine motor control, motor learning.