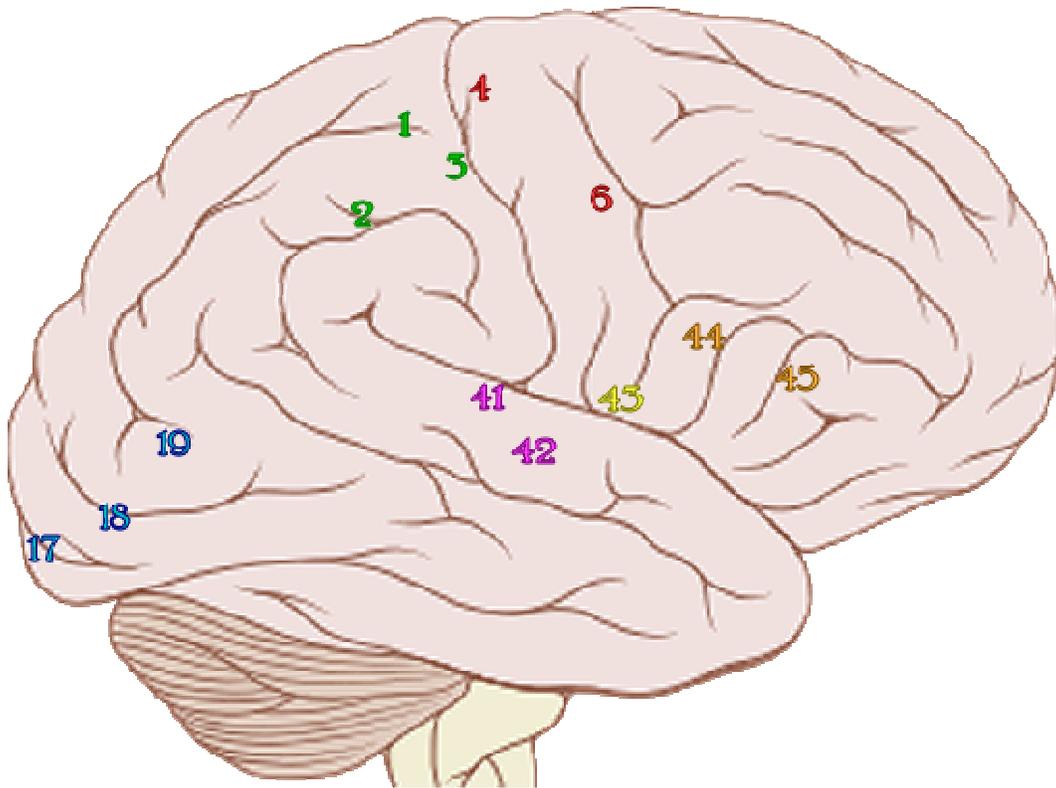


Unit 10 Quiz

1. What is a primary difference between grey and white matter in the cerebral cortex?
 - A) White matter is glial cells and myelinated axons, while grey matter is neuronal cell bodies.
 - B) White matter is cell bodies, while grey matter consists of myelinated axons.
 - C) White matter appears white when stained with a Nissel-grain stain, while grey matter appears grey when stained.
 - D) White matter is involved with emotions, while grey matter is involved with motor functions.





Source: http://commons.wikimedia.org/wiki/File:Brodmann_areas.png

2. Label the Brodmann area in this figure with its primary function. Functions: Secondary Visual Cortex; Primary Somatosensory Cortex; Primary Visual Cortex; Premotor Cortex; Motor Cortex; Auditory Association Cortex; Broca's Area.
 - A) 1
 - B) 4
 - C) 6
 - D) 17
 - E) 18
 - F) 41
 - G) 44

3. What is the primary function of the association cortices?
 - A) Regulating visceral organ function.
 - B) Controlling motor function.
 - C) Attending to external stimuli identifying the significance of such stimuli, and planning meaningful responses to them.
 - D) Correlating external stimuli with autonomic responses.



4. Contralateral neglect syndrome is an example of what type of neurological condition?
 - A) Lesion of sensory cortex.
 - B) Lesion of accessory cortex.
 - C) Lesion of memory cortex.
 - D) None of the above

5. Which of the following is NOT a language area of the cerebral cortex?
 - A) Brodmann's area 45
 - B) Brodmann's area 44
 - C) Brodmann's area 22
 - D) Brodmann's area 3

6. What is the definition of Broca's aphasia?
 - A) Inability to move muscles of face and tongue that mediate speaking.
 - B) Inability to connect words in a sentence correctly.
 - C) Ability to hear words spoken, but not understand their meaning.
 - D) Inability to remember what was spoken.

7. A prominent feature of non-REM sleep is which of the following?
 - A) Rapid eye movements
 - B) Fast-wave sleep
 - C) Slow-wave sleep
 - D) Slow eye movements

8. Order these steps of the circadian rhythm pathway in anatomical order. Use 1 for the first step, 2 for the second step, etc.
 - A) Superior cervical ganglion
 - B) Suprachiasmatic nucleus
 - C) Pineal gland
 - D) Intermediolateral cell column

9. Lunesta is what type of sleep aid?
 - A) Opiate
 - B) Non-benzodiazepine hypnotic
 - C) Benzodiazepine
 - D) Anti-convulsant

10. Match the following syndrome with the correct symptom. Syndromes are insomnia (I); Sleep apnea (SA); Restless leg syndrome (RLS); Narcolepsy (N).
 - A) Interrupted breathing during sleep
 - B) Inability to sleep
 - C) Tendency to fall asleep during the day
 - D) Constant leg movement



11. Which of the following is NOT part of the limbic system?
- A) Cingulate gyrus
 - B) Amygdala
 - C) Mammillary bodies
 - D) Corpus callosum
12. Why is the amygdala an important structure in emotional response?
- A) All emotions originate in the amygdala.
 - B) The amygdala has many connections to other parts of the brain including visual, auditory, and sensory projections.
 - C) The amygdala is directly linked to the heart.
 - D) The amygdala is connected to the spinal cord.
13. Declarative memory includes which of the following?
- A) Facts and events
 - B) Skills and habits
 - C) Emotional responses
 - D) Classical conditioning
14. The striatum is involved with which type of learning?
- A) Facts and events
 - B) Skills and habits
 - C) Emotional responses
 - D) Classical conditioning
15. Short-term memory is defined by the ability to hold information in the mind for _____ and long-term memory is defined by the ability to hold information in the mind for _____. Fill in the blanks.
- A) Fractions of seconds, days-years
 - B) Seconds-minutes, minutes-hours
 - C) Fractions of seconds, minutes-hours
 - D) Seconds-minutes, days-years
16. Which type of sleep aid is typically used to treat restless legs syndrome?
- A) Benzodiazepines
 - B) Non-benzodiazepine hypnotics
 - C) Anti-convulsants
 - D) Antinarcotics
17. Which of the following brain structures are involved in long-term storage of procedural information?
- A) Basal ganglia
 - B) Wenicke's area
 - C) Hypothalamus
 - D) Optic nerve tract



18. A lesion of the fornix which disconnects the hippocampus from the anterior thalamic nuclei may cause which syndrome?
- A) Insomnia
 - B) Narcolepsy
 - C) Amnesia
 - D) Alzheimer's Disease
19. Retrograde amnesia refers to which of the following?
- A) Loss of new memories.
 - B) Loss of old memories.
 - C) Loss of memories of facts and events.
 - D) Loss of classical conditioning.
20. There are several characteristic neuropathologies associated with Alzheimer's Disease. Which of the following is NOT one of these neuropathologies?
- A) Loss of neurons in the cerebral cortex
 - B) Amyloid plaques
 - C) Neurofibrillary tangles
 - D) Increased acetylcholine neurotransmission

