Brain and Cranial Nerves

Study Slides
Which of the following links the cerebral hemispheres with the brain stem?

A. medulla oblongata
B. pons
C. mesencephalon
D. diencephalon
E. cerebellum
ANSWER

Which of the following links the cerebral hemispheres with the brain stem?

A. medulla oblongata
B. pons
C. mesencephalon
D. diencephalon
E. cerebellum
The cells that are in close contact with CNS capillaries and also cover the outer surfaces of endothelial cells are termed

A. blastocystes.
B. astrocytes.
C. monocytes.
D. leukocytes.
E. lymphocytes.
The cells that are in close contact with CNS capillaries and also cover the outer surfaces of endothelial cells are termed

A. blastocyes.

B. astrocytes.

C. monocytes.

D. leukocytes.

E. lymphocytes.
The respiratory rhythmicity center is found in:
A. the midbrain.
B. the cerebellum.
C. the medulla oblongata.
D. the cerebellum.
E. all of the above
The respiratory rhythmicity center is found in

A. the midbrain.
B. the cerebellum.

C. the **medulla oblongata**.
D. the cerebellum.
E. all of the above
The tracts that connect the cerebellum to the brain stem are located in the
A. medulla oblongata.
B. pons.
C. mesencephalon.
D. diencephalon.
E. thalamus.
The tracts that connect the cerebellum to the brain stem are located in the
A. medulla oblongata.
B. pons.
C. mesencephalon.
D. diencephalon.
E. thalamus.
You suspect your friend has damage to cranial nerve I when he is unable to
A. open his jaw.
B. smell.
C. blink his eye.
D. nod his head.
E. all of the above
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A. open his jaw.
B. smell.
C. blink his eye.
D. nod his head.
E. all of the above
The two cerebral hemispheres are separated by the
A. longitudinal fissure.
B. central sulcus.
C. lateral sulcus.
D. parieto-occipital sulcus.
E. postcentral sulcus.
ANSWER

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A. longitudinal fissure.
B. central sulcus.
C. lateral sulcus.
D. parieto-occipital sulcus.
E. postcentral sulcus.
The regulation of autonomic function, such as heart rate and blood pressure, originates in the
A. cerebrum.
B. cerebellum.
C. diencephalon.
D. medulla oblongata.
E. heart.
The regulation of autonomic function, such as heart rate and blood pressure, originates in the

A. cerebrum.
B. cerebellum.
C. diencephalon.
D. **medulla oblongata.**
E. heart.
Major centers concerned with autonomic control of breathing, blood pressure, heart rate, and digestive activities are located in the

A. medulla oblongata.
B. pons.
C. mesencephalon.
D. diencephalon.
E. cerebellum.
Major centers concerned with autonomic control of breathing, blood pressure, heart rate, and digestive activities are located in the

A. medulla oblongata.
B. pons.
C. mesencephalon.
D. diencephalon.
E. cerebellum.
Divisions of the cerebral hemispheres that are named after the overlying skull bones are

A. fissures.
B. sinuses.
C. lobes.
D. sulci.
E. gyri.
ANSWER

Divisions of the cerebral hemispheres that are named after the overlying skull bones are
A. fissures.
B. sinuses.
C. lobes.
D. sulci.
E. gyri.
If the corpus callosum is cut,
A. cross-referencing of sensory information is inhibited.
B. the individual talks constantly but uses the wrong words.
C. objects touched with the left hand can be recognized but cannot be verbally identified.
D. objects touched with the right hand cannot be verbally identified.
E. there is no noticeable effect.
ANSWER

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A person with a damaged visual association area may be
A. unable to scan the lines of a page or see rows of clear symbols.
B. declared legally blind.
C. unable to recognize letters but able to identify words and their meanings.
D. able to see letters quite clearly but unable to recognize or interpret them.
E. visually and sensory impaired.
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C. **unable to recognize letters but able to identify words and their meanings.**
D. able to see letters quite clearly but unable to recognize or interpret them.
E. visually and sensory impaired.
Which of the following represents a link between the nervous and endocrine systems?

A. cerebellum
B. medulla oblongata
C. cerebrum
D. pons
E. hypothalamus
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A. cerebellum
B. medulla oblongata
C. cerebrum
D. pons
E. hypothalamus
The area anterior to the central sulcus is the
A. parietal lobe.
B. temporal lobe.
C. frontal lobe.
D. occipital lobe.
E. insula.
ANSWER

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A. parietal lobe.
B. temporal lobe.
C. frontal lobe.
D. occipital lobe.
E. insula.
During the middle of the twentieth century, a drastic procedure termed prefrontal lobotomy was used to cure a variety of mental illnesses.

A. True

B. False
During the middle of the twentieth century, a drastic procedure termed prefrontal lobotomy was used to cure a variety of mental illnesses.

A. True
B. False
There are _____ pairs of cranial nerves.

A. 2
B. 6
C. 10
D. 12
E. 31
There are _____ pairs of cranial nerves.

A. 2  
B. 6  
C. 10 
D. 12 
E. 31
Damage to which of the following cranial nerves could result in death?

A. abducens
B. facial
C. glossopharyngeal
D. vagus
E. hypoglossal
ANSWER

Damage to which of the following cranial nerves could result in death?

A. abducens
B. facial
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D. vagus
E. hypoglossal
The movement of the head in the direction of a loud noise is coordinated in the mesencephalon. Which nuclei are most likely involved in this process?

A. substantia nigra  
B. red nuclei  
C. tectum  
D. superior colliculi  
E. inferior colliculi
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Damage to the superior colliculi of the mesencephalon would interfere with the ability to
A. express rage.
B. voluntarily move the arm.
C. react to the movement of a car with the eyes.
D. react to loud noises.
E. maintain proper posture.
ANSWER

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  A. express rage.
  B. voluntarily move the arm.
  C. **react to the movement of a car with the eyes.**
  D. react to loud noises.
  E. maintain proper posture.
After suffering a stroke, Mary finds that she cannot move her right arm. This would suggest that the stroke damage is in the area of the _____ lobe.

A. right frontal
B. left frontal
C. right temporal
D. left temporal
E. occipital
After suffering a stroke, Mary finds that she cannot move her right arm. This would suggest that the stroke damage is in the area of the _____ lobe.

A. right frontal
B. left frontal
C. right temporal
D. left temporal
E. occipital
The visual cortex is located in the
A. frontal lobe.
B. parietal lobe.
C. temporal lobe.
D. occipital lobe.
E. insula.
The visual cortex is located in the

A. frontal lobe.
B. parietal lobe.
C. temporal lobe.
D. occipital lobe.
E. insula.
The auditory cortex is located in the
A. frontal lobe.
B. parietal lobe.
C. temporal lobe.
D. occipital lobe.
E. insula.
ANSWER

- The auditory cortex is located in the
  A. frontal lobe.
  B. parietal lobe.
  C. **temporal lobe.**
  D. occipital lobe.
  E. insula.
Cerebrospinal fluid
A. is secreted by ependymal cells.
B. is formed by a passive process.
C. is normally produced twice as fast as it is removed.
D. has exactly the same composition as blood plasma.
E. both A and D
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Bob is struck on the left side of the head with a board and is knocked unconscious. When he recovers consciousness, he can hear but cannot understand what is being said to him. This implies damage to the

A. inner ear.
B. general interpretive area.
C. speech center.
D. prefrontal lobe.
E. temporal lobe.
ANSWER

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Jane suffers from chronic seizures and in order to control the problem undergoes surgery in which the fibers of the corpus callosum are cut. As a result of this surgery she would be unable to

A. speak.
B. move her left arm.
C. verbally identify an object placed in her left hand.
D. recognize written words.
E. touch her nose with her eyes closed.
Jane suffers from chronic seizures and in order to control the problem undergoes surgery in which the fibers of the corpus callosum are cut. As a result of this surgery she would be unable to

A. speak.
B. move her left arm.
C. **verbally identify an object placed in her left hand.**
D. recognize written words.
E. touch her nose with her eyes closed.
Jean needs to have a tooth filled. Her dentist gives her a shot of novocaine to numb the branches of one of the cranial nerves so she won’t feel any discomfort. What cranial nerve is the dentist numbing?

A. trochlear
B. trigeminal
C. vagus
D. glossopharyngeal
E. hypoglossal
Jean needs to have a tooth filled. Her dentist gives her a shot of novocaine to numb the branches of one of the cranial nerves so she won’t feel any discomfort. What cranial nerve is the dentist numbing?

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B. trigeminal
C. vagus
D. glossopharyngeal
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Regions of the brain that are involved in interpreting data or coordinating motor responses are called _____ areas.

A. commissural
B. sensory
C. association
D. somesthetic
E. processing
Regions of the brain that are involved in interpreting data or coordinating motor responses are called ____ areas.

A. commissural
B. sensory
C. association
D. somesthetic
E. processing
The pons contains

A. sensory and motor nuclei for six cranial nerves.
B. nuclei concerned with the control of blood pressure.
C. tracts that link the cerebellum with the brain stem.
D. no ascending or descending tracts.
E. both A and B
The pons contains

A. sensory and motor nuclei for six cranial nerves.
B. nuclei concerned with the control of blood pressure.
C. tracts that link the cerebellum with the brain stem.
D. no ascending or descending tracts.
E. both A and B
The highest levels of information processing occur in the
A. cerebrum.
B. mesencephalon.
C. cerebellum.
D. medulla.
E. spinal cord.
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A. cerebrum.
B. mesencephalon.
C. cerebellum.
D. medulla.
E. spinal cord.
Overseeing the postural muscles of the body and making rapid adjustments to maintain balance and equilibrium are functions of the

A. cerebrum.
B. mesencephalon.
C. cerebellum.
D. pons.
E. medulla.
ANSWER

Overseeing the postural muscles of the body and making rapid adjustments to maintain balance and equilibrium are functions of the

A. cerebrum.
B. mesencephalon.
C. cerebellum.
D. pons.
E. medulla.
Higher-order functions

A. are subject to adjustments and modification over time.
B. involve complex interactions between areas of the cortex and other areas of the brain.
C. involve both conscious and unconscious information processing.
D. all of the above
E. B and C only
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A. are subject to adjustments and modification over time.
B. involve complex interactions between areas of the cortex and other areas of the brain.
C. involve both conscious and unconscious information processing.
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E. B and C only
The medulla oblongata regulates
A. blood pressure.
B. kidney function.
C. respiration.
D. both A and B
E. both A and C
The medulla oblongata regulates

A. blood pressure.
B. kidney function.
C. respiration.
D. both A and B
E. both A and C
The white matter of the cerebellum forms the
A. flocculonodular lobe.
B. arbor vitae.
C. folia.
D. vermis.
E. pyramid.
The white matter of the cerebellum forms the

A. flocculonodular lobe.
B. arbor vitae.
C. folia.
D. vermis.
E. pyramid.
Which of the following help to protect the brain?

A. the blood–brain barrier.
B. the bones of the cranium.
C. the cranial meninges.
D. the CSF
E. all of the above
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A. the blood–brain barrier.
B. the bones of the cranium.
C. the cranial meninges.
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E. all of the above