AnimatedPsych.com

VIDEO GUIDE · UNIT 1 · TOPIC 1.4

The Brainstem and Cerebellum

Watch the lesson

Name _____ Class _____ Date _____

NOTES: FILL IN THE BLANKS WHILE YOU WATCH

The brainstem

1. The _____ connects the brain to the spinal cord and helps control the body's most basic functions.
2. The _____, at its base, controls vital automatic functions such as breathing and heart rate (think: a medal over the heart and lungs).
3. The _____ (RAS) regulates alertness and arousal, including wakefulness. Memory trick: RAS = Rise and shine!
4. Key dopamine pathways of the _____ start in the brainstem, helping motivate behavior and learn from rewarding experiences.

The cerebellum

5. The _____ ("little brain"), at the lower back of the brain, coordinates movement and balance.
6. It also contributes to _____: practiced movements, like riding a bicycle, become more automatic.

CHECK YOUR UNDERSTANDING

1. After an injury, a man sways and stumbles when he walks, and his movements look jerky. Which structure is most likely damaged?

(A) Medulla
(B) Reticular activating system
(C) Spinal cord
(D) Cerebellum

2. A patient in a deep coma shows no conscious awareness, yet he keeps breathing and his heart keeps beating without machines. Which structure keeps these functions going?

(A) Cerebellum
(B) Medulla
(C) Reticular activating system
(D) Reward system

AP® is a registered trademark of the College Board, which is not affiliated with, and does not endorse, this site.

3. Researchers block dopamine pathways that start in a rat's brainstem. The rat still breathes, moves, balances, and stays awake normally, but it stops pressing a lever that used to deliver food. Which system was most likely disrupted?

(A) Reward system

(B) Medulla

(C) Cerebellum

(D) Reticular activating system

NOTES

AP® is a registered trademark of the College Board, which is not affiliated with, and does not endorse, this site.