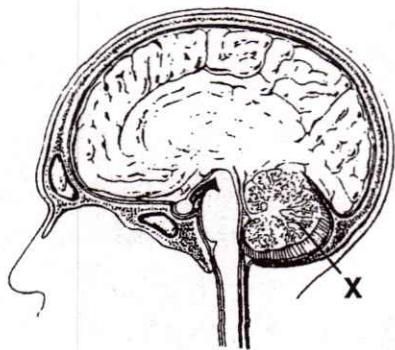


Name: _____

1. The part of the human central nervous system that controls breathing is the
- (1) cerebrum (3) medulla
 (2) cerebellum (4) spinal cord

2. The diagram below represents the human brain



The structure labeled X is most directly involved in the

- (1) control of breathing and heartbeat
 (2) maintenance of coordination and balance
 (3) interpretation of sensory impulses
 (4) initiation of voluntary actions

3. Memory and thinking are most closely associated with which part of the central nervous system?

- (1) spinal cord (3) cerebrum
 (2) medulla (4) cerebellum

4. Impulses originating in the part of the brain called the medulla would most directly affect which body structure?

- (1) a leg muscle (3) an arm bone
 (2) a ligament (4) the heart

5. In humans, the center for regulating the amount of oxygen in the blood is situated in the

- (1) cerebrum (3) medulla
 (2) cerebellum (4) spinal cord

6. An increase in the amount of carbon dioxide in the blood stimulates the respiratory center of the brain. As a result, impulses are sent from the
- (1) medulla to the diaphragm, increasing the rate of breathing
 (2) cerebrum to the chest muscles, decreasing the rate of breathing
 (3) medulla to the trachea, causing it to constrict
 (4) cerebrum to the alveoli, causing them to actively transport oxygen

7. A man suffers a head injury in a car accident. For several days afterward, he has difficulty remembering phone numbers. This loss of memory results from damage to the man's

- (1) cerebrum (3) medulla
 (2) cerebellum (4) spinal cord

8. Which portion of the central nervous system coordinates motor activities and aids in maintaining balance?

- (1) cerebrum (3) medulla
 (2) cerebellum (4) spinal cord

9. In the human central nervous system, the medulla directly controls

- (1) voluntary activity (3) involuntary activity
 (2) memory (4) balance

10. _____ } raw materials
 11. _____ } of photosynthesis

12. _____ } raw materials of
 13. _____ } respiration

15. _____ (organelle of photosynthesis)

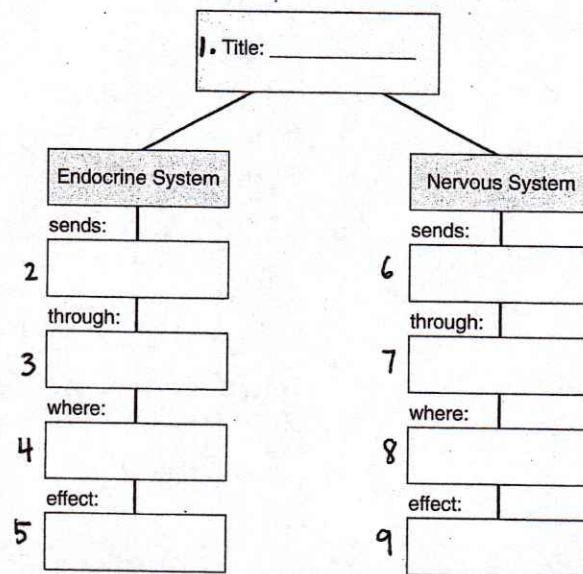
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Homework # 3.9

Question 1 : Explain what hormones are and tell the following facts about them:

- 1 • What body system releases them into the blood?
- 2 • What body system carries them throughout the body?
- 3 • What body system controls the release of hormones?

Question 2 : Use the following ^{words} terms to fill in the boxes of the following chart, which compares the endocrine system and the nervous system: electrical impulse, chemical messenger, nerve cells, bloodstream, to muscles and glands, from glands to target cells, rapid responses, slow changes.



Question 3 : The best title for this concept map probably would be (Circle your answer)

- 1 Why the Endocrine System is better than the Nervous System
- 2 Why the Nervous System is better than the Endocrine System
- 3 Contrasting Features of the Body's Communication Networks
- 4 The Role of Chemicals in the Body's Feedback Mechanisms