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Brain Anatomy Worksheet

Choose the brain structure that has is best described below and then label it on the brain picture below.

| b. Medulla Oblongata | e. Midbrain | h. Hypothalamus | k. Cerebral Cortex |
| c. Pons | f. Cerebellum | i. Pituitary Gland |

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- ____ Governs basic movement patterns such as eating, drinking and grooming (e)
- ____ Forms the most important connection between the two hemispheres of the brain (j)
- ____ Relays sensory information to higher brain regions (g)
- ____ Largest structure of the brain containing the four lobes (k)
- ____ Releases hormones which stimulate and regulate endocrine glands (i)
- ____ Carries somatosensory information to the brain and carries motor-control information to the motor neurons (a)
- ____ Regulates motor messages travelling from higher brain regions to the cerebellum (c)
- ____ Controls vital physiological functions including heartbeat, circulation, and respiration (b)
- ____ Helps initiate and control rapid movements of the limbs (f)
- ____ Helps regulate the internal environment of the body (h)
- ____ Monitors general activity and maintains arousal in the brain (d)

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Midsagittal Section - Visible Structures

![Brain Diagram](https://via.placeholder.com/150?text=Brain+Diagram)
Quiz Questions

1. An animal whose spinal cord has been severed from the rest of the brain retains __________.  
*(flexion reflexes)*

2. The medulla controls functions such as __________, __________, and __________ meaning humans and mammals will __________ without a functioning medulla.  
*(heartbeat, circulation, and respiration; die)*

3. The pons regulates motor messages travelling from __________ to __________.  
*(higher brain regions; cerebellum)*

4. Severe damage to the reticular formation can lead to __________.  
*(permanent state of sleep)*

5. The midbrain acts to modify visual and auditory messages by ______________.  
*(suppressing or amplifying visual/auditory neural information)*

6. The cerebellum is most active during __________ and during __________.  
*(learning of new movements; unpredictable chains of movement)*

7. All __________, excluding those of the __________, are relayed through the thalamus on their way to the cortex.  
*(sensory messages; sense of smell)*

8. It is thought that the limbic system evolved from a system for the __________, explaining why __________ can be emotionally potent.  
*(sophisticated analysis of smell; odours)*

9. The hypothalamus is able to regulate __________ through __________ receptors within the hypothalamus itself.  
*(blood-sugar levels; glucose)*

10. The pituitary gland can affect and is affected by emotional states. __________, for example, can produce hormonal changes that can make an individual more susceptible to __________.  
*(chronic fear or stress; anxiety or depression)*

11. Severing the corpus callosum can reduce the severity of ______________.  
*(some forms of epilepsy)*

12. The primary motor area occupies the __________ portion of the __________ lobe.  
*(posterior; frontal)*