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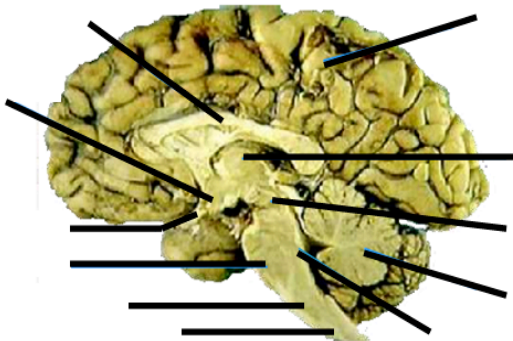
## Brain Anatomy Worksheet

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

a. Spinal Cord	d. Reticular Formation	g. Thalamus	j. Corpus Callosum
b. Medulla Oblongata	e. Midbrain	h. Hypothalamus	k. Cerebral Cortex
c. Pons	f. Cerebellum	i. Pituitary Gland	

- \_\_\_ 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*)

### Midsagittal Section - Visible Structures



## 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*)