

CEREBRUM

CEREBELLUM

MEDULLA OBLONGATA

CORPUS CALLOSUM

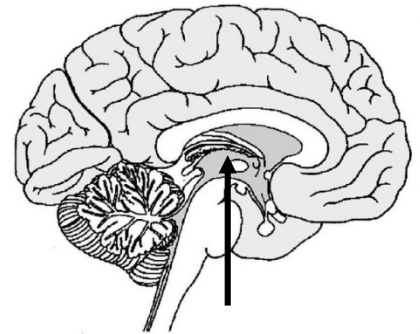
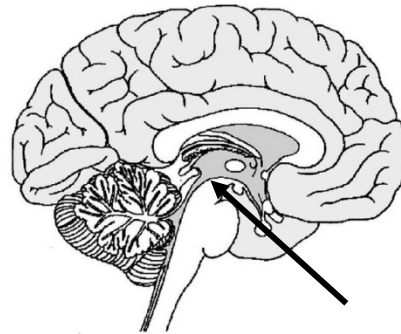
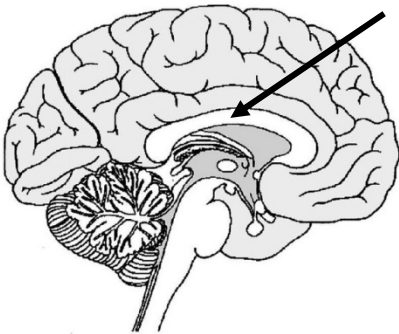
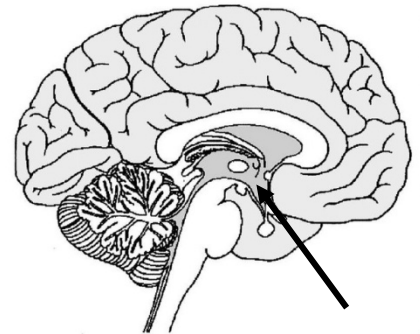
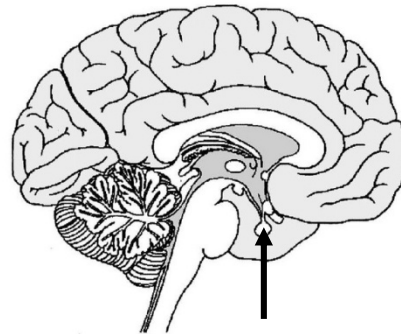
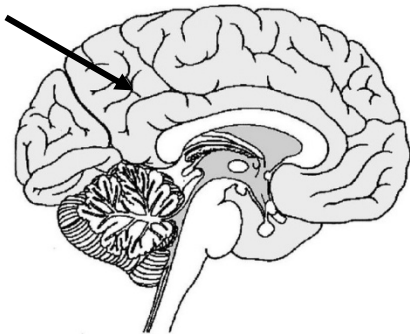
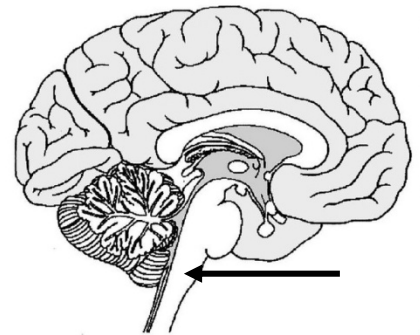
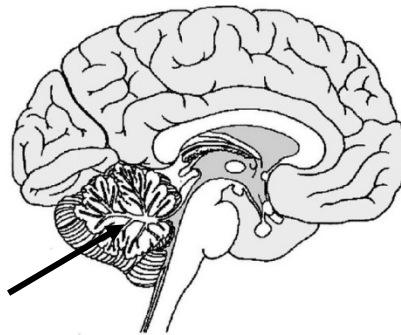
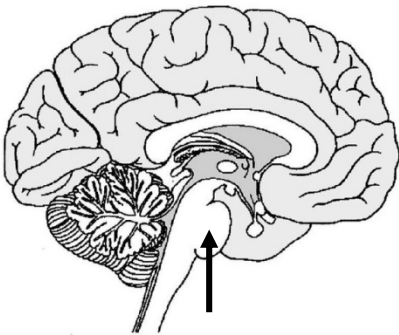
THALAMUS

HYPOTHALAMUS

PONS

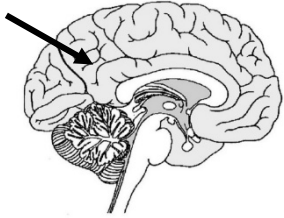
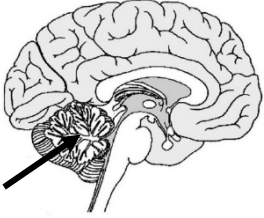
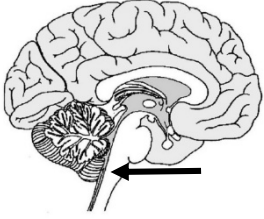
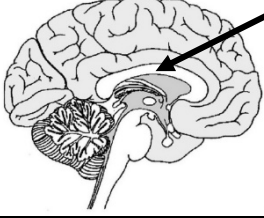
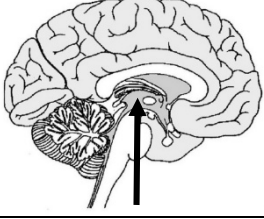
PITUITARY GLAND

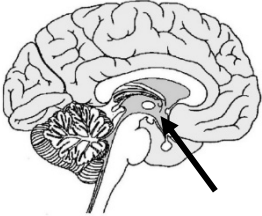
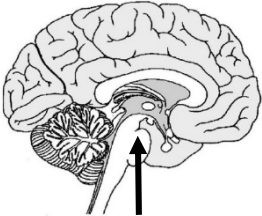
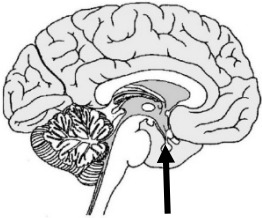
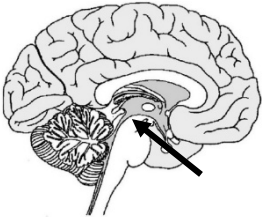
MIDBRAIN



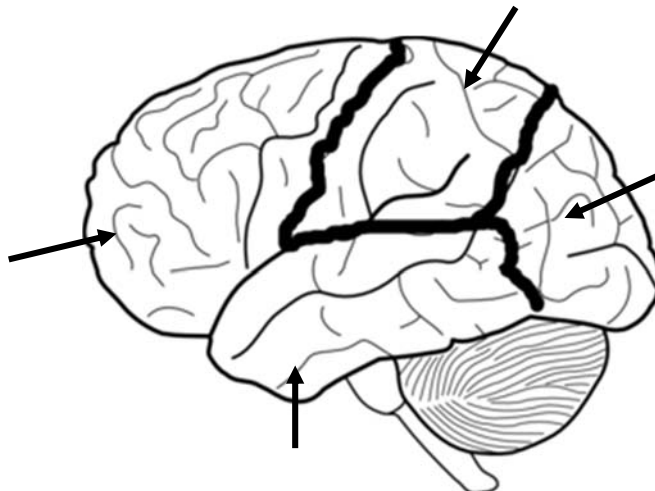
Separated into posterior and anterior regions	Maintains homeostasis as it contains a number of reflex centers for regulating heartbeat, breathing, blood pressure, etc.	Largest portion of the brain in humans. Divided left and right hemispheres
Consists of two masses of gray matter that form the sides and roof of the third ventricle	Transfers motor, sensory, and cognitive information between brain hemispheres	Contains reflex centers for vomiting, coughing, sneezing, hiccupping and swallowing.
Acts as a relay station for tracts passing between the cerebrum and the spinal cord or cerebellum	Carries out higher thought processes required for learning and memory and for learning and speech	Manufactures hormones and controls the pituitary gland.
Communicates with and coordinates activities with other parts of the brain	Connected to the hypothalamus by a stalk like structure called the "infundibulum"	Involved in the arousal of the cerebellum and higher mental functions such as memory and emotions
Has reflex centers for visual, auditory, and tactile responses	Sends motor impulses to skeletal muscles to help maintain posture and balance	Serves as a link between the nervous and endocrine systems.

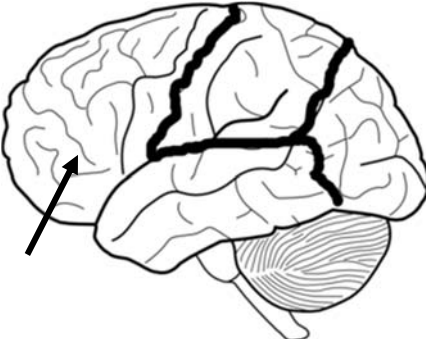
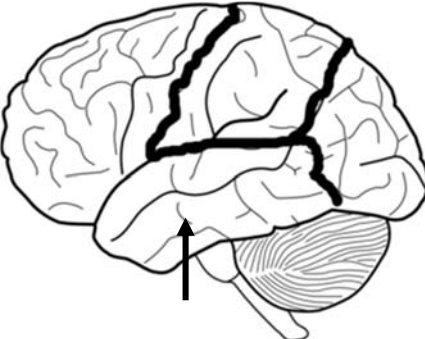

<p>Contains bundles of axons travelling between the cerebellum and rest of the CNS</p>	<p>Assists in the learning of new motor skills</p>	<p>Receives sensory input via cranial nerves and tracts from the spinal cord and integrates this information before sending it on to the cerebellum</p>
<p>Top portion of the brain stem</p>	<p>Functions with the medulla oblongata to regulate breathing rate</p>	<p>Acts as a “bridge” of white matter.</p>
<p>Part of the endocrine system. Releases various hormones such as oxytocin and various stimulating hormones</p>	<p>Part of the brain stem that is continuous with the spinal cord.</p>	<p>Has reflex centers concerned with the head movements in response to visual and auditory stimuli</p>
<p>Also known as the “little brain”. Cross-section shows a pattern known as the “Arbor Vitae” (tree of life)</p>	<p>Integrating center that helps maintain homeostasis by regulating hunger, sleep, thirst, body temperature and water balance</p>	<p>Composed of nerve fibers that connect the left and right hemispheres of the cerebrum.</p>

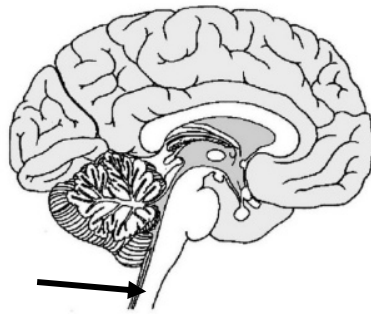
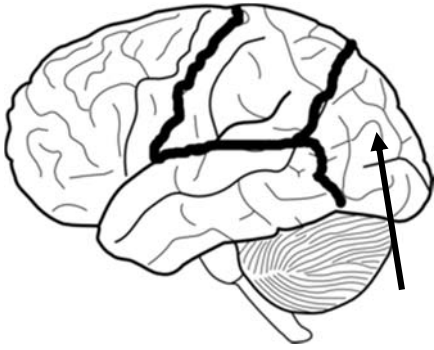
<b>CEREBRUM</b>			
	Communicates with and coordinates activities with other parts of the brain	Carries out higher thought processes required for learning and memory and for learning and speech	Largest portion of the brain in humans. Divided left and right hemispheres.
<b>CEREBELLUM</b>			
	Sends motor impulses to skeletal muscles to help maintain posture and balance	Assists in the learning of new motor skills	Also known as the “little brain”. Cross-section shows a pattern known as the “Arbor Vitae” (tree of life)
<b>MEDULLA OBLONGATA</b>			
	Maintains homeostasis as it contains a number of reflex centers for regulating heartbeat, breathing, blood pressure, etc.	Contains reflex centers for vomiting, coughing, sneezing, hiccupping and swallowing.	Part of the brain stem that is continuous with the spinal cord.
<b>CORPUS CALLOSUM</b>			
	Composed of nerve fibers that connect the left and right hemispheres of the cerebrum.	Acts as a “bridge” of white matter.	Transfers motor, sensory, and cognitive information between brain hemispheres
<b>THALAMUS</b>			
	Receives sensory input via cranial nerves and tracts from the spinal cord and integrates this information before sending it on to the cerebellum	Involved in the arousal of the cerebellum and higher mental functions such as memory and emotions	Consists of two masses of gray matter that form the sides and roof of the third ventricle

<b>HYPOTHALAMUS</b>			
	Integrating center that helps maintain homeostasis by regulating hunger, sleep, thirst, body temperature and water balance	Manufactures hormones and controls the pituitary gland.	Serves as a link between the nervous and endocrine systems.
<b>PONS</b>			
	Contains bundles of axons travelling between the cerebellum and rest of the CNS	Functions with the medulla oblongata to regulate breathing rate	Has reflex centers concerned with the head movements in response to visual and auditory stimuli
<b>PITUITARY GLAND</b>			
	Part of the endocrine system. Releases various hormones such as oxytocin and various stimulating hormones	Separated into posterior and anterior regions	Connected to the hypothalamus by a stalk like structure called the "infundibulum"
<b>MIDBRAIN</b>			
	Acts as a relay station for tracts passing between the cerebrum and the spinal cord or cerebellum	Has reflex centers for visual, auditory, and tactile responses	Top portion of the brain stem

Extra practice: Can you name each of the 4 lobes and state their basic function?



		
<p>FRONTAL LOBE</p>	<p>TEMPORAL LOBE</p>	<p>PARIETAL LOBE</p>
<p>Primary motor area. Responsible for voluntary commands to skeletal muscles (e.g. moving hands)</p>	<p>Primary auditory area. Receives sound information from our ears.</p>	<p>Primary somatosensory area. Primary taste area. Receives information from taste buds.</p>
<p>Contains motor speech (Broca's) area. Associated with higher level cognition.</p>	<p>Contains sensory speech (Wernicke's) area and is where the primary olfactory area for smell is location.</p>	<p>Processes sensory information such as pressure, touch and pain.</p>
<p>Lobe found at the anterior end of the cerebrum (behind the forehead)</p>	<p>Lobe found at the sides of the cerebrum (at the temple and ear area)</p>	<p>Lobe that lies dorsal to the frontal lobe.</p>



OCCIPITAL LOBE

SPINAL CORD

Contains primary visual area where information is received from the eyes

Extends from the base of the brain through a large opening in the skull and into the vertebral canal

Damage to this lobe can cause visual problems such as difficulty recognizing objects, colours and words.

Composed of a central canal, grey matter in an H-shaped configuration surrounded by white matter

Lobe found at the back of the cerebrum (rear of the head)

Location where portions of sensory and motor neurons are found as well as entire interneurons.

