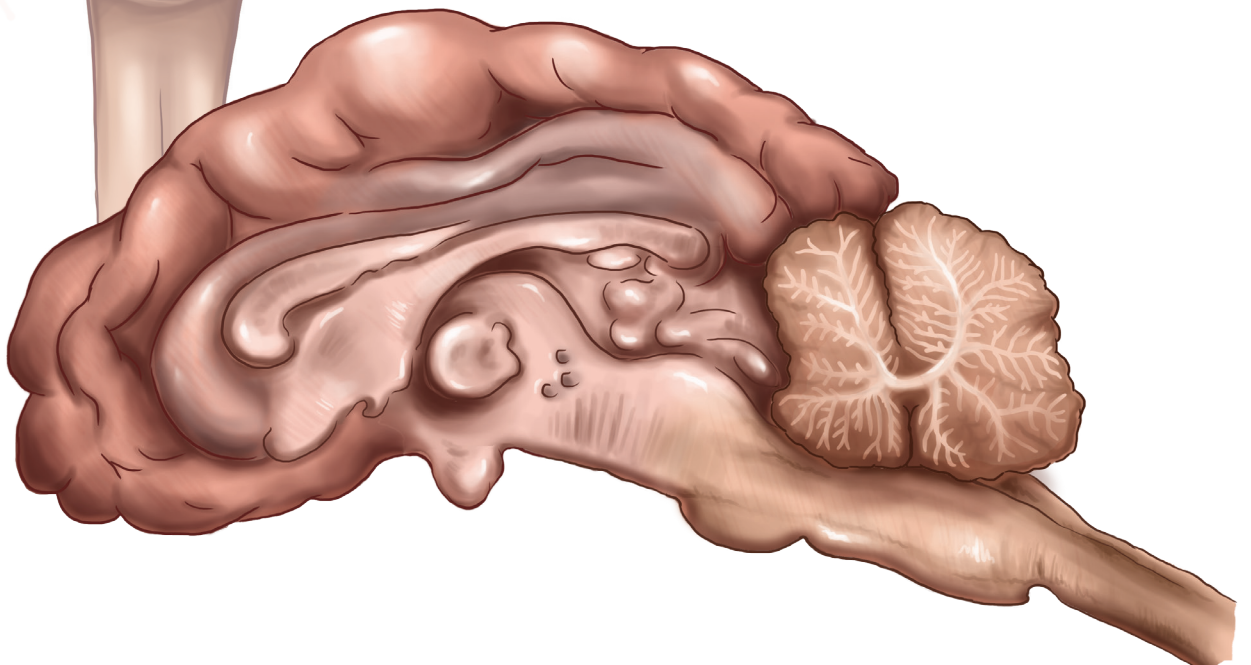




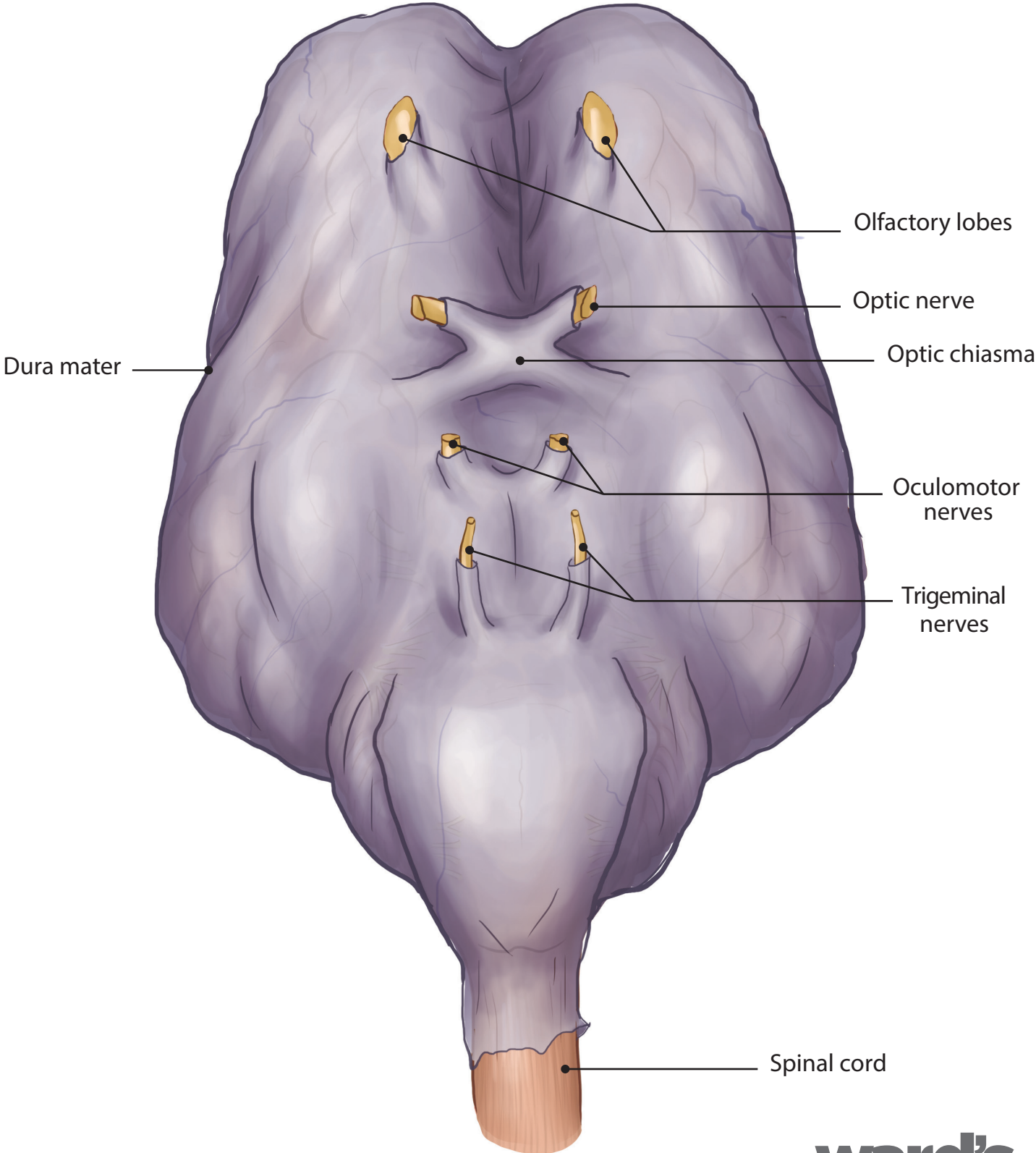
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Brain Dissection Guide

Illustrated by Veronica Zoekler

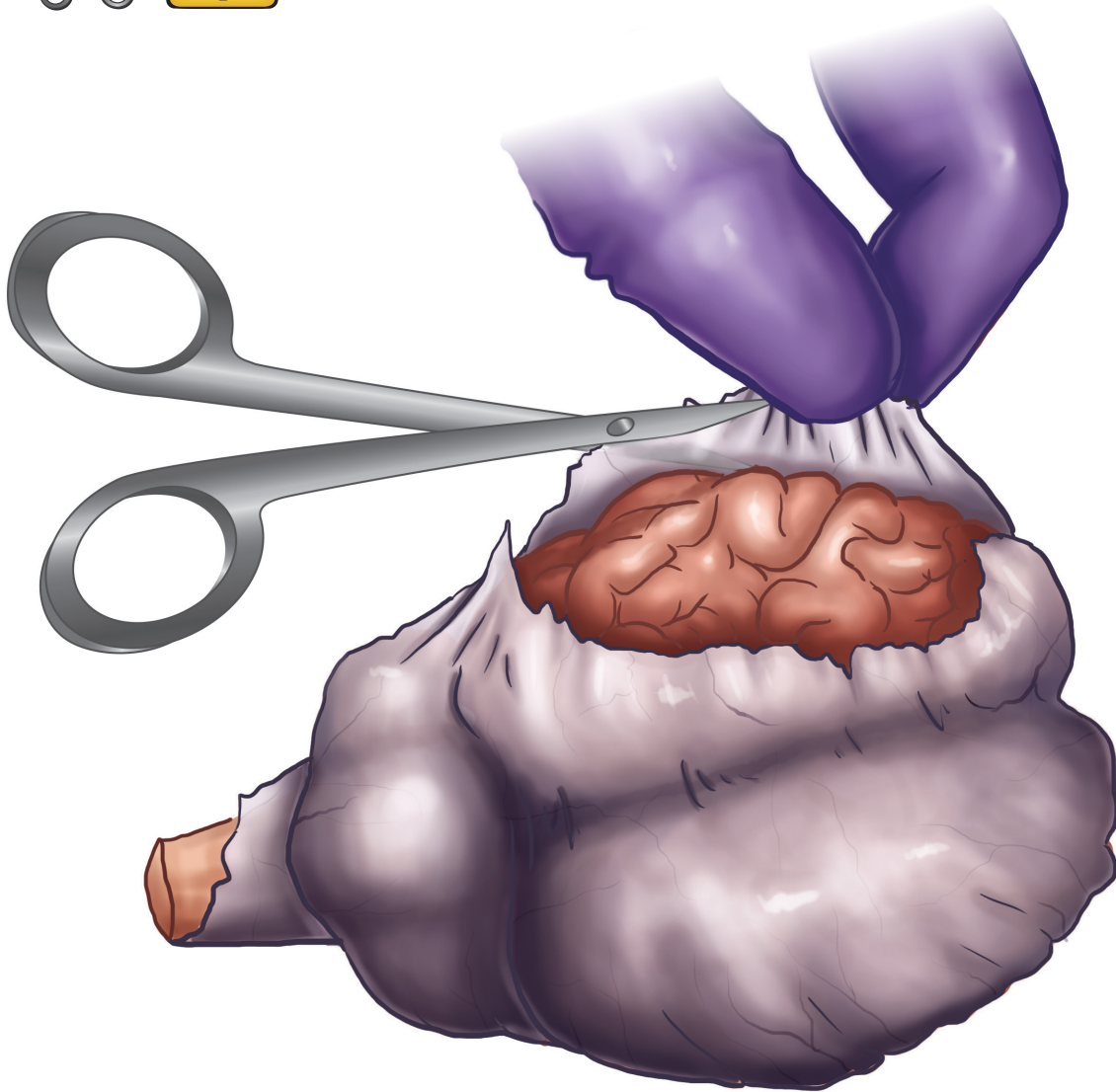


Ventral View with Dura Mater

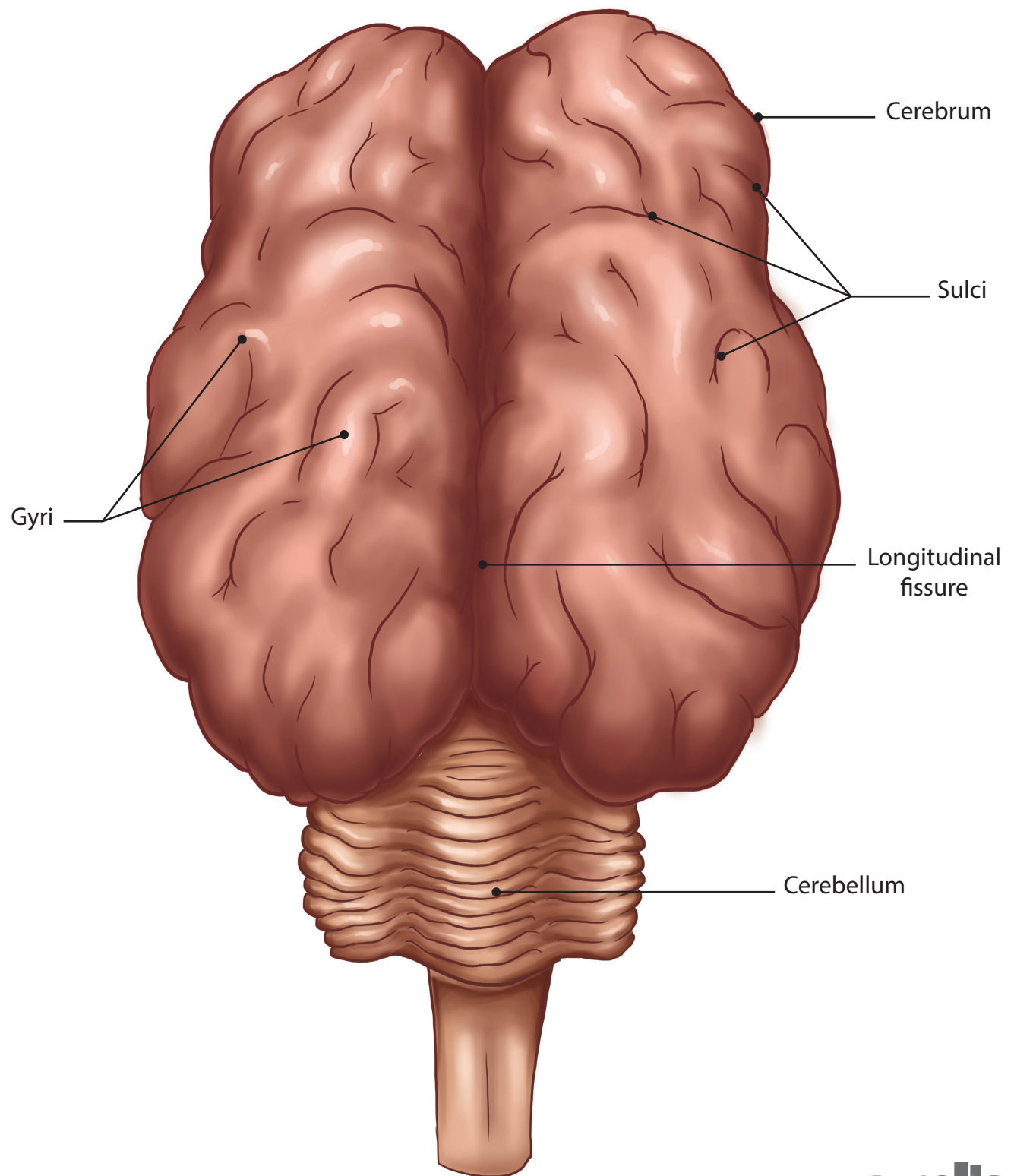


Removing Dura

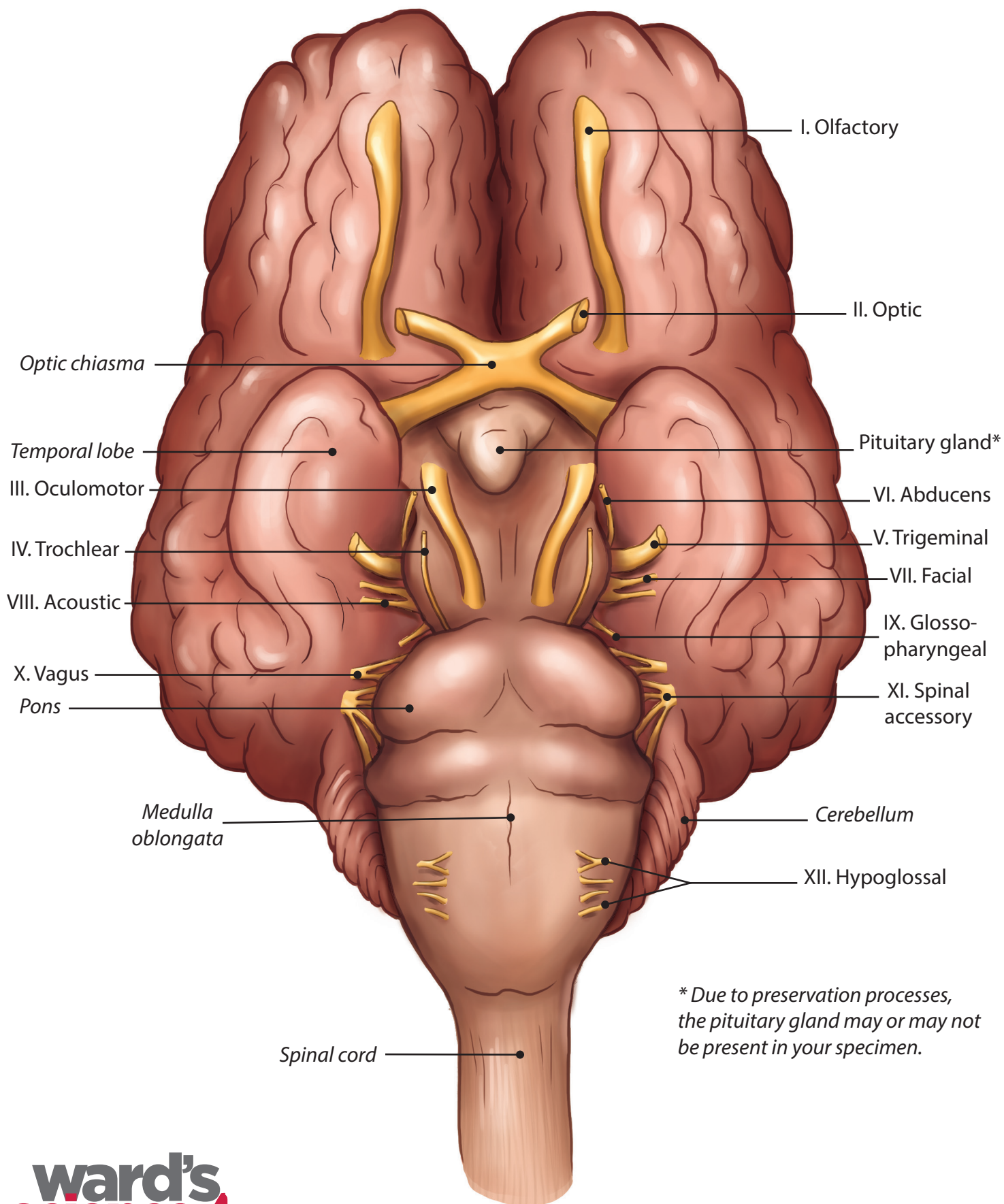
Carefully remove the dura mater from the brain. Be extremely careful when removing the membrane from around the optic, oculomotor, and trigeminal nerves and around the hypophysis (pituitary gland).



Dorsal View

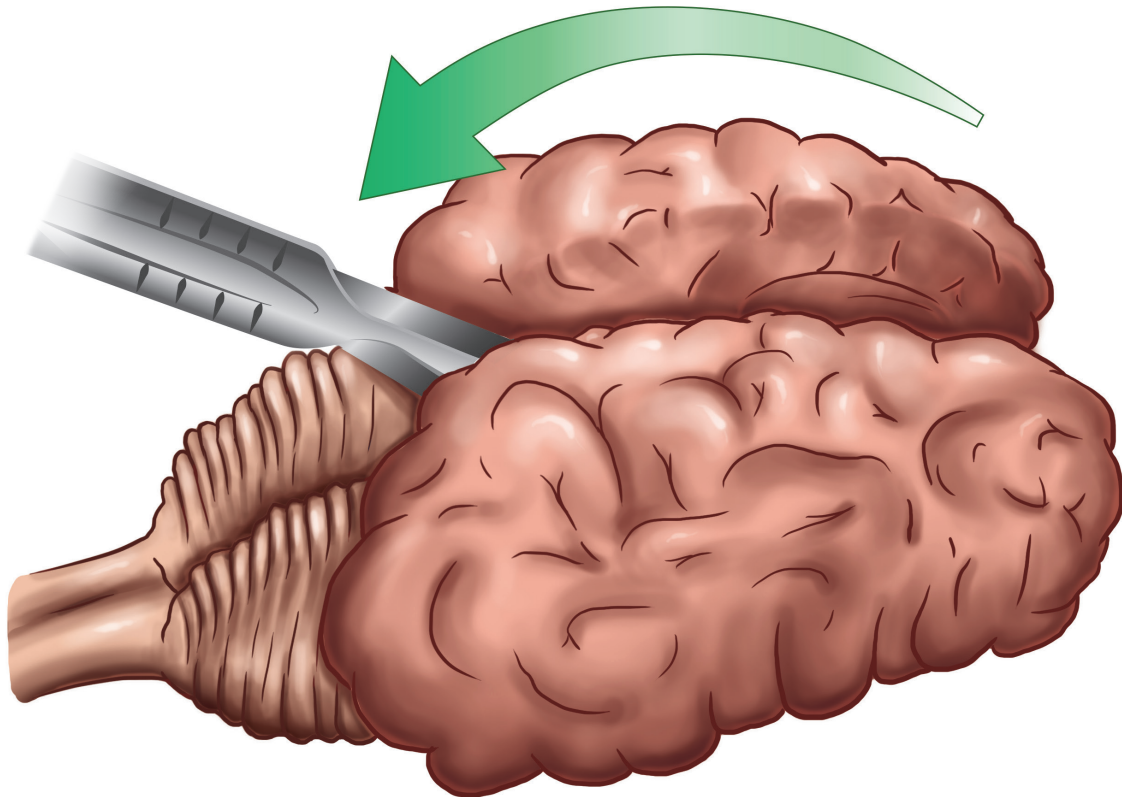


Cranial Nerves

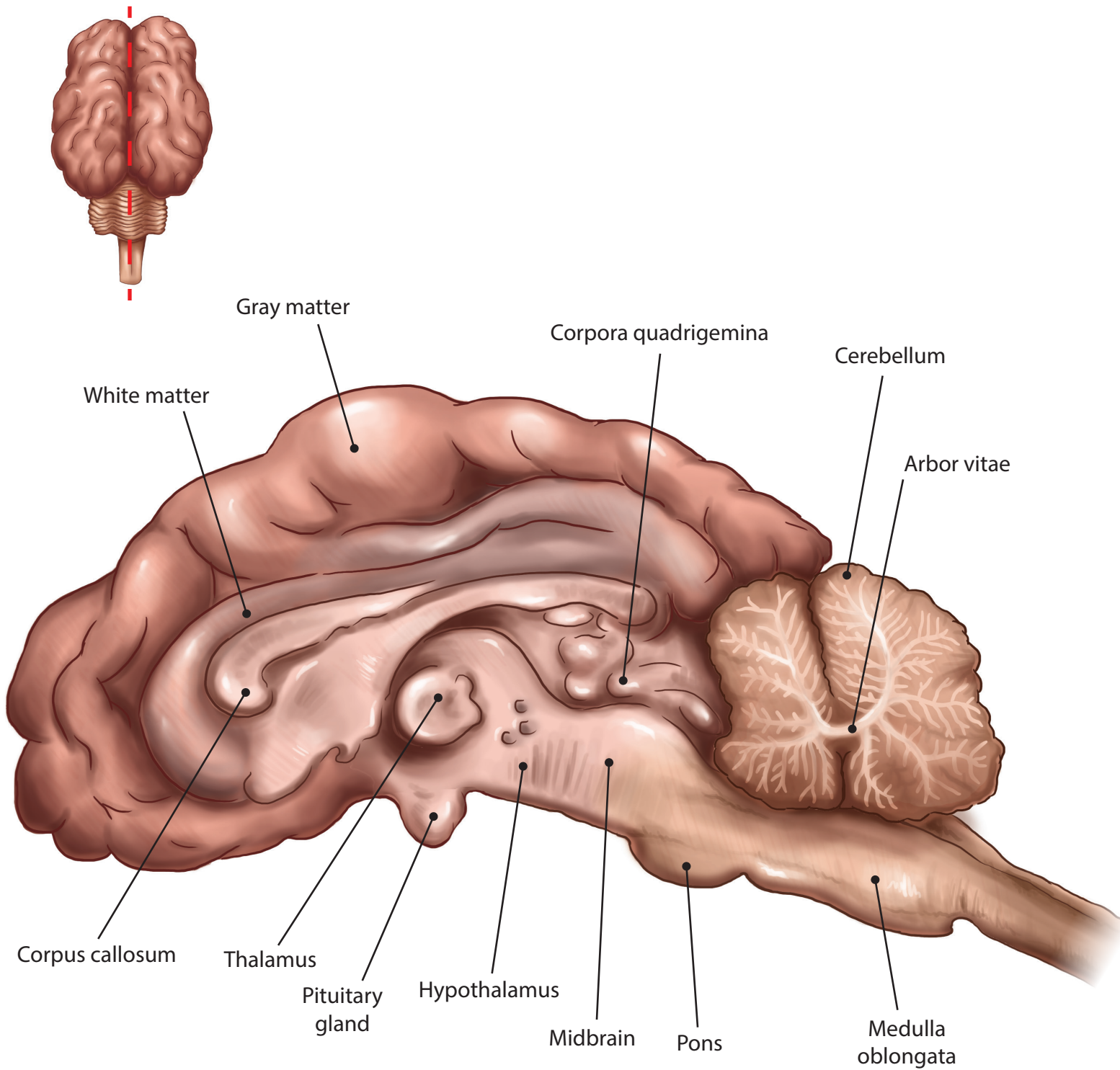


Bisection

Using a large scalpel, cut along the longitudinal fissure to divide the brain into two halves. See the next page to locate the various features of the brain on your cross section.



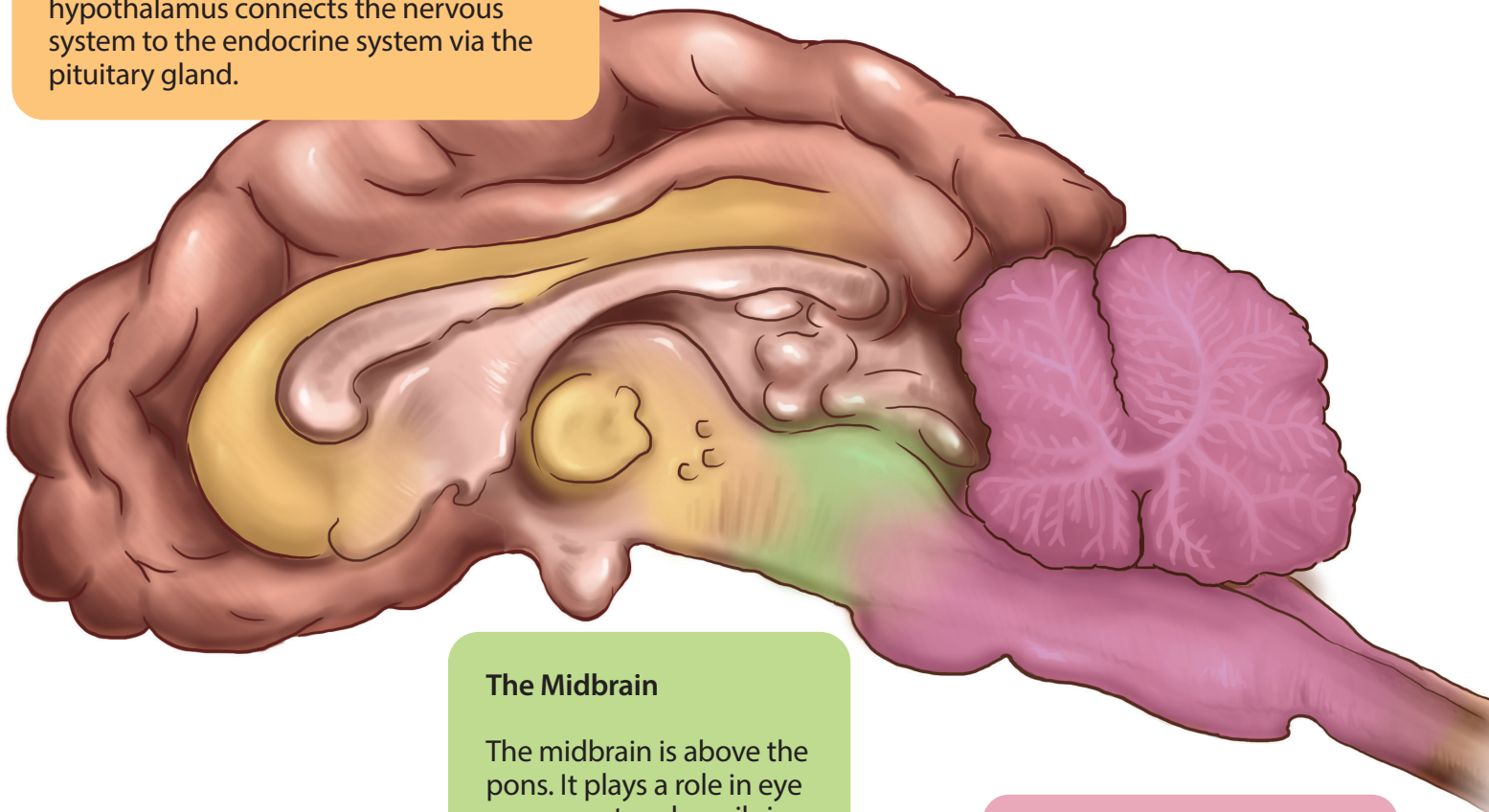
Sagittal View



Functional Divisions

The Forebrain

The forebrain is made up of the cerebrum, thalamus and hypothalamus. Sensory information is processed here. The forebrain also stores memories. The thalamus directs and relays sensory information in the cerebrum. The hypothalamus connects the nervous system to the endocrine system via the pituitary gland.



The Midbrain

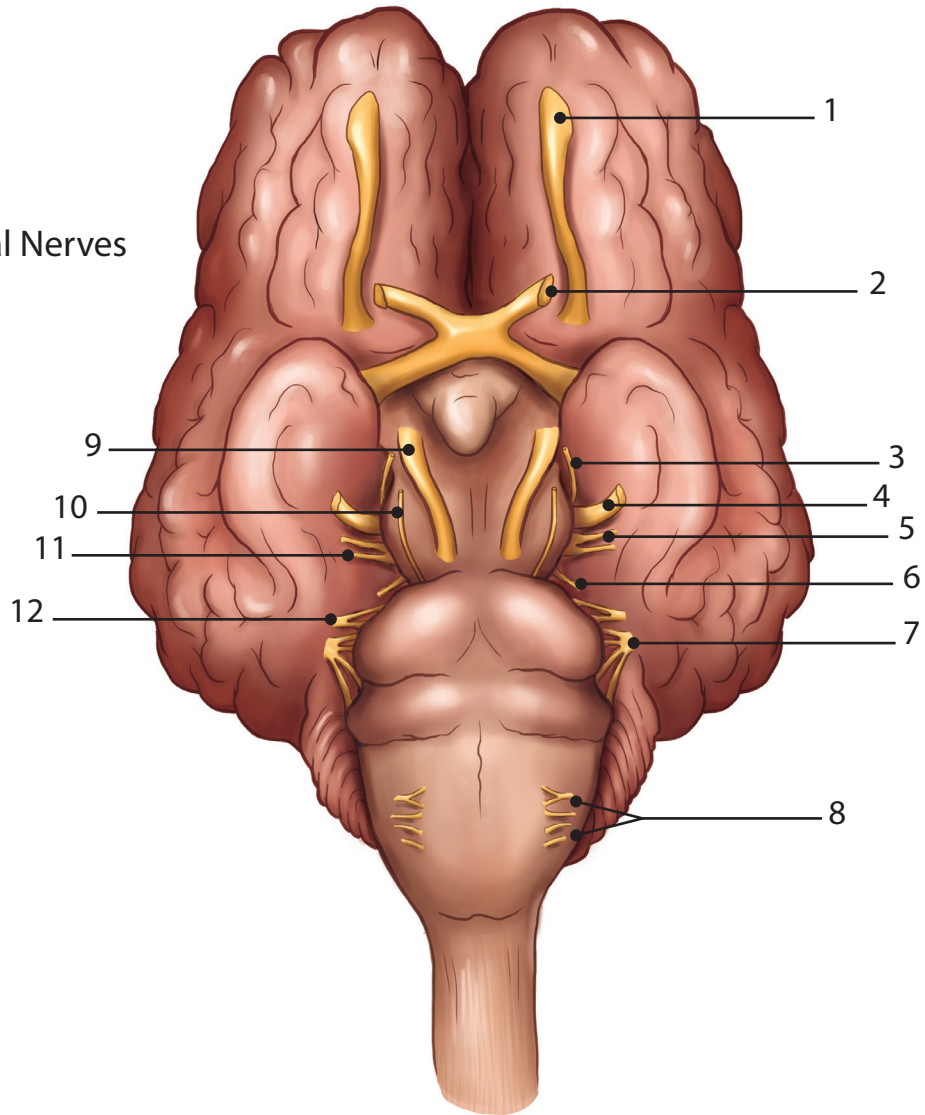
The midbrain is above the pons. It plays a role in eye movement and pupil size. It also helps to integrate sensory information from the eyes and ears to fine tune muscle movement.

The Hindbrain

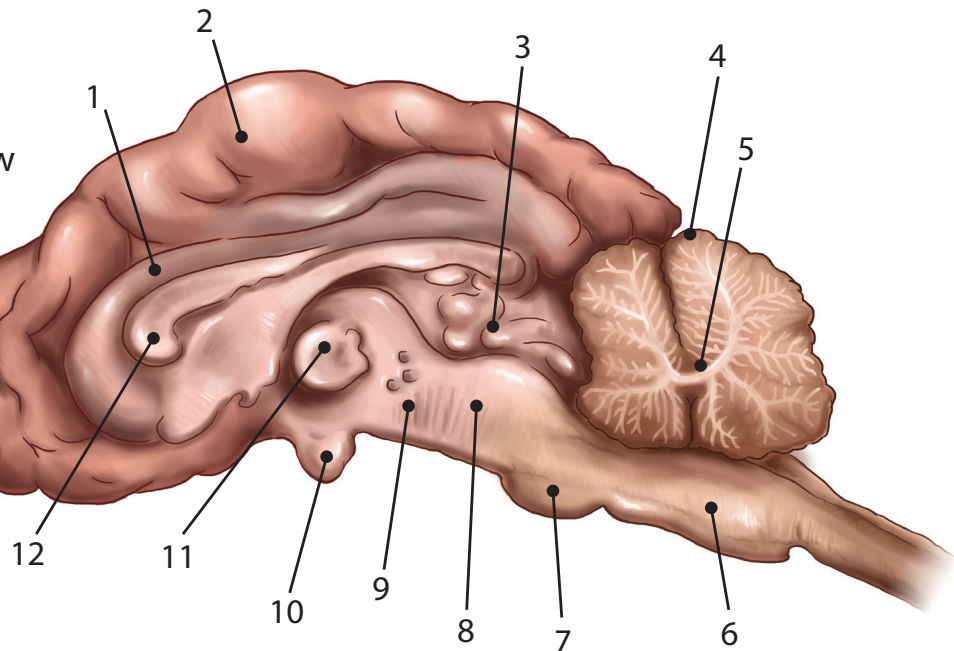
The hindbrain consists of the cerebellum, medulla oblongata and pons. Many autonomic functions, such as breathing and blood pressure, are controlled by the hindbrain.

Quiz

Cranial Nerves



Sagittal View



Answer Key

Cranial Nerves

1. I. Olfactory
2. II. Optic
3. VI. Abducens
4. V. Trigeminal
5. VII. Facial
6. IX. Glossopharyngeal
7. XI. Spinal accessory
8. XII. Hypoglossal
9. III. Oculomotor
10. IV. Trochlear
11. VIII. Acoustic
12. X. Vagus

Sagittal View

1. White matter
2. Gray matter
3. Corpora quadrigemina
4. Cerebellum
5. Arbor vitae
6. Medulla oblongata
7. Pons
8. Midbrain
9. Hypothalamus
10. Pituitary gland
11. Thalamus
12. Corpus callosum

