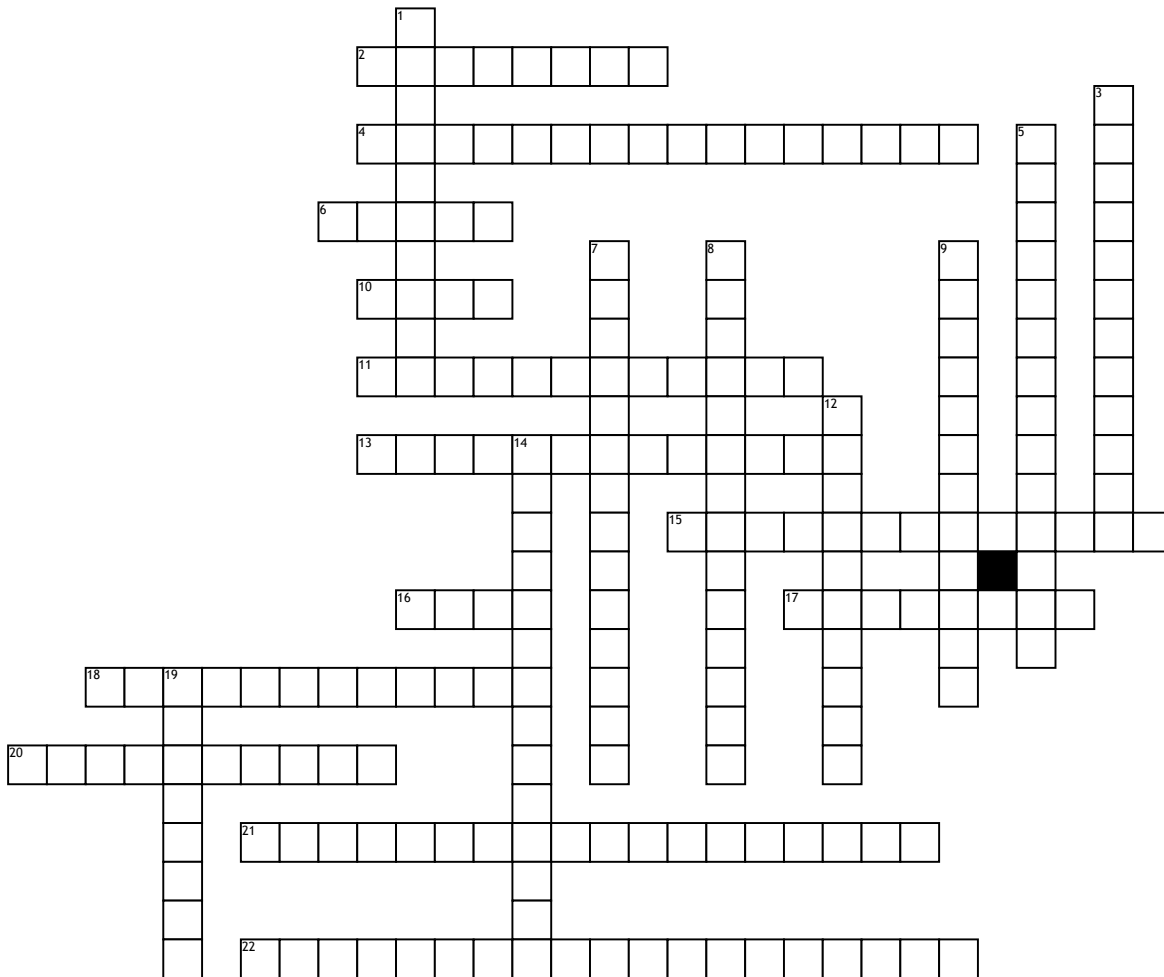


# Major parts of the brain



## Across

2. A region that is also called the “mesencephalon”. It is located above the pons and is the smallest part of the brain stem. The oculomotor, trochlear, and trigeminal cranial nerves originate in this area.

4. The medulla is at the base of the brain stem. It contains nerve centers for the regulation of heart rate, blood vessel diameter, respiration, swallowing, vomiting coughing, sneezing, and hiccoughing.

6. These are the shallow groves in the surface of the cerebrum.

10. The pons is located just above the medulla, on the brain stem. It works with the medulla to control respiration and helps regulate sleep. It is the origin for the trigeminal, abducens, facial, and vestibulocochlear cranial nerves

11. The structure that is the major integration system between various organ systems and the nervous system. It coordinates activities of both the nervous and endocrine systems, and between voluntary and autonomic activities. It is attached directly to the pituitary gland.

13. This lobe lies between the occipital bone and the parieto-occipital sulcus. It functions to receive and interpret visual signals.

15. These structures lie between the parietal bones and the central sulcus. They function in integration of sensory information with the exception of vision, hearing, and smell.

16. These are the thick folds in the surface of the cerebrum.

17. The cerebrum is the largest part of the brain in mammals. It is composed of the frontal, parietal, occipital, and temporal lobes.

18. A structure that is located on the bottom-center of the brain where the two optic nerve cross.

20. The spinal or nerve cord is located in the vertebral foramen. It begins at the foramen magnum and ends at the conus medullaris in the lumbar region. It conducts sensory impulses to the brain and motor impulses from the brain to the body

21. The longitudinal fissure divides the cerebrum into right and left cerebral hemispheres.

22. This fissure is a deep groove separating the cerebrum into right and left halves.

## Down

1. The region that regulates the day/night cycle. Secretes the hormone melatonin, which effects sleepiness.

3. This lobe lies between the temporal bone and the lateral sulcus. It functions in memory, vision, learning, hearing, and emotional behavior.

5. The part of the brain that contains the nerve tracts and physically joins the two cerebral hemispheres.

7. These bulbs are located just below the frontal lobes. They function in the sense of smell.

8. A structure that processes olfactory information and contains centers for reflex movements involved in eating, such as chewing, licking, and swallowing.

9. These structures lie between the frontal bones and the central sulcus, and above the eye orbits. They have motor functions, but also deal with aggression, mood, foresight, motivation, and social judgements.

12. The second largest part of the brain in mammals and the largest part of the brain in birds. The cerebellum is involved in the regulation of posture and balance, fine motor control of skeletal muscles, and repetitive movements.

14. An endocrine gland directly attached to the hypothalamus. It is divided into anterior and posterior portions. Anterior pituitary produce hormones which regulate other endocrine glands, and directly affects target cells. Posterior pituitary functions to store and release hormones produced by the hypothalamus.

19. This structure functions to integrate all sensory information (with the exception of smell) from the body, and channels it into proper processing regions in the cerebrum.