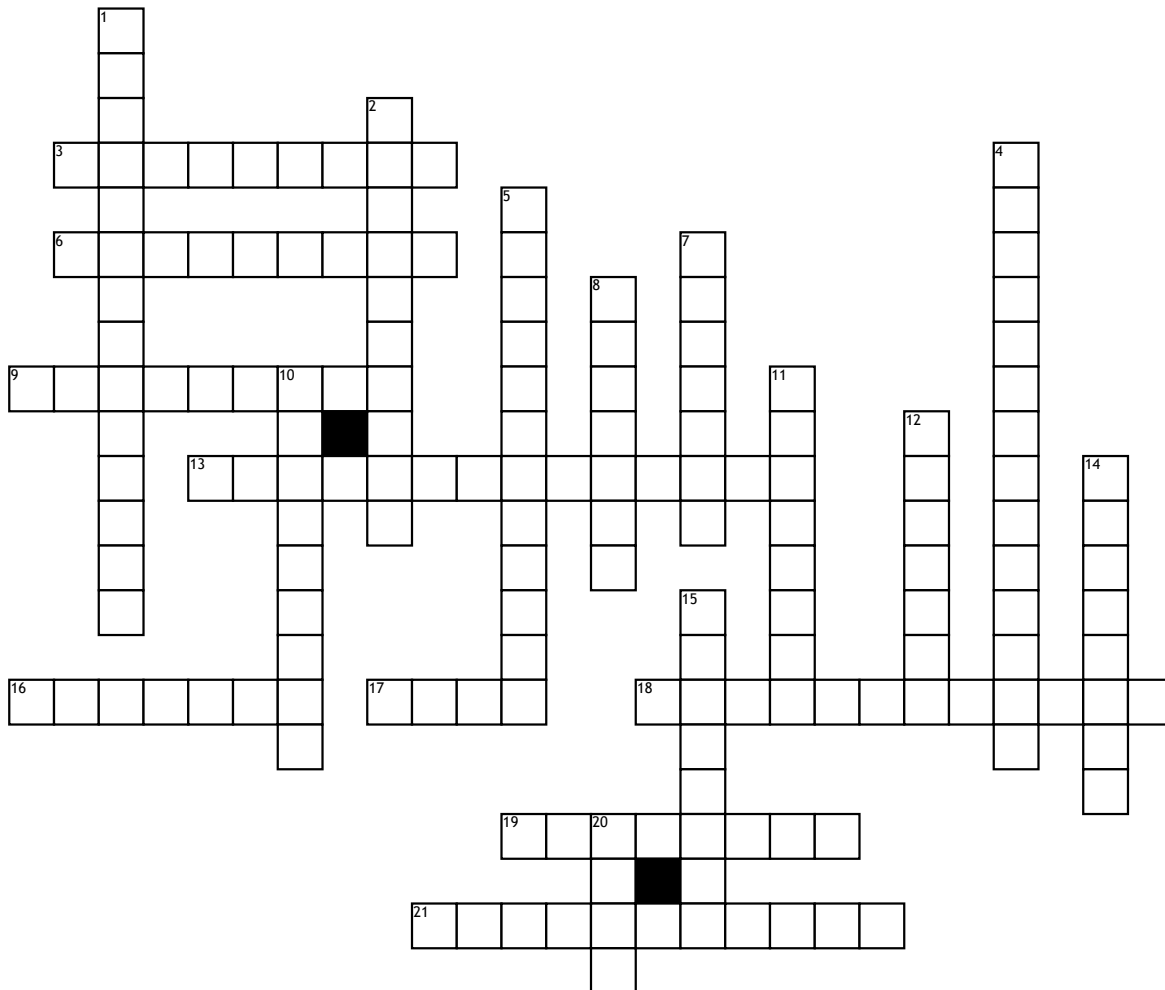


# Big Brainsy Project Crossword Puzzle



## Across

3. A short branched extension of a nerve cell, along which impulses received from other cells at synapses are transmitted to the cell body
6. Structurally continuous with the spinal cord that provides the main motor and sensory innervation in the face and neck
9. The lobe located at the back of the head and processes what we see
13. Two halves of the brain are connected by this, allows two sides of the brain to communicate with each other
16. Located at the front of the head, this carries out higher mental processes such as thinking, decision making, and planning
17. Contains nuclei that relay signals from the forebrain to the cerebellum
18. The insulating covering that surrounds the axon with multiple spiral layers of myelin

19. Two masses of gray matter lying between the cerebral hemispheres on either side of the third ventricle, relaying sensory information and acting as a center for pain perception
21. Part of the limbic system, located in the medial temporal lobe, involved in storage of long term memory

## Down

1. Thin layer of gray matter covering the surface of each cerebral hemisphere
2. Receives information from the sensory systems, the spinal cord, and other parts of the brain and regulates motor movements like posture, balance, and coordination
4. A gap in the myelin sheath of a nerve
5. Responsible for production of many of the body's hormones and chemical substances. Functions include thirst, hunger, sleep, mood, sex drive, and release of other hormones
7. A junction between two nerve cells, consisting of a minute gap across which impulses pass by diffusion of neurotransmitters

8. Lower half of the brainstem that contains the cardiac, respiratory, and vasomotor centers and deals with involuntary functions
10. Tips of the axon branches where the signal can cause release of neurotransmitters
11. This lobe is responsible for processing auditory information
12. The central and most important part of an object, forming the basis for its activity and growth
14. This lobe processes sensory information that has to do with taste, temperature, and touch
15. One on each side of the brain, part of the limbic system which is responsible for emotions, survival instincts and memory
20. The long threadlike part of a nerve cell along which impulses are conducted from the cell body to other cells