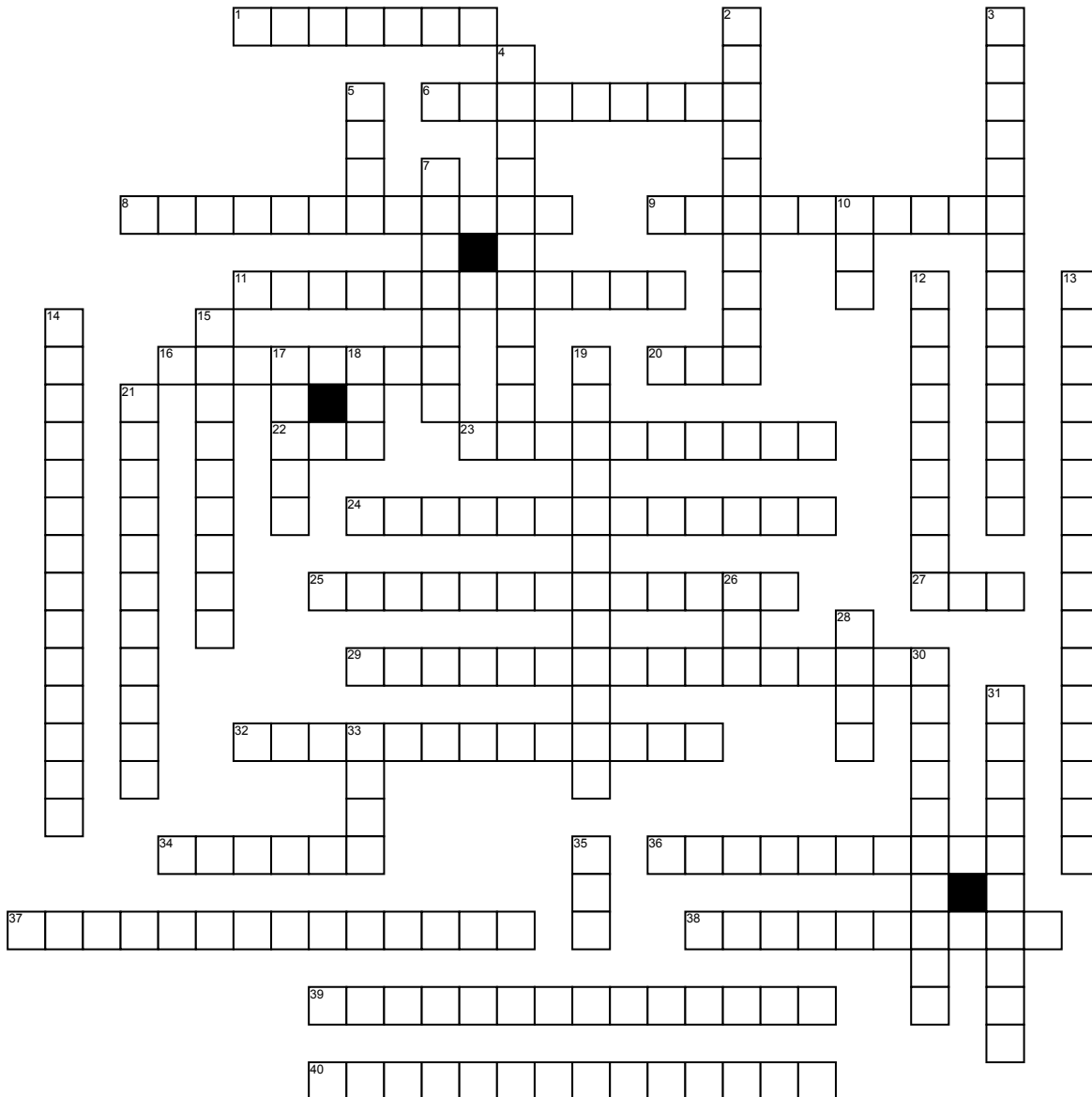


Name: _____

Date: _____

The Nervous System



Across

1. The neurotransmitter is released from the cell to travel across the space between these terminal fibers and the dendrites of the next cell
6. The tough fibrous outer covering of the meninges
8. A substance produced by the Schwann cells that coats the axons in the peripheral nervous system
9. Connects neurons and blood vessels and form a structure
11. Contain the auditory and olfactory areas, and are where sequencing and memory occur
16. Connects the pons and cerebellum with the hemispheres of the cerebrum
20. Composed of the nerves that extend from the brain and spinal cord to the tissues of the body
22. Mostly involuntary functions are controlled by this system. Involuntary muscles like the heart, glands and organs
23. The outer cell membrane of the Schwann cell
24. Functions in the physiological response to stress
25. Responsible for vision
27. This system is voluntary in nature. These nerves collect information from and return instructions to the skin, muscles and joints
29. Small, rounded structures that participate in the ability to recognize people, places and objects that are stored in memory

32. The structure responsible for our sense of smell
 34. The basic unit of the nervous system is
 36. Coordinates voluntary movement but is involuntary in its function
 37. The surfaces of the hemispheres are covered with gray matter
 38. The 31 pairs of spinal nerves emerge from the spinal cord
 39. Carry impulses away from the brain and spinal cord
 40. Carry impulses to the brain and spinal cord
- ## Down
2. Skin surface areas supplied by a single afferent spinal nerve
 3. The thick band of nerve fibers that joins the two hemispheres of the cerebrum
 4. Contains the function of speech and the motor area that controls voluntary movement on the contralateral side of the body
 5. Serves as a bridge between the medulla oblongata and the cerebellum
 7. The basic unit of the nervous system
 10. Composed of the brain and spinal cord. It connects the sensory and motor neurons
 12. Projections from the cell body, receive neural impulses
 13. Lowest part of the brainstem. Regulates heart rate, blood pressure and breathing

14. Line the ventricles of the brain and produce cerebrospinal fluid
15. Perform an active protective function by engulfing and ingesting infectious organisms
17. One of the most complex organs of the body
18. Consists of nerves that regulate involuntary function such as cardiac or smooth muscle
19. Control the sensations of touch and taste, and also control spatial perception
21. Responsible for empathy, interceptive awareness, and cognition
26. Prevents or slows the passage of some drugs and disease-causing organisms to the CNS
28. The cells that provide supportive function
30. Extends from the medulla oblongata to the first lumbar vertebra
31. Spinal cord is composed of
33. A slender elongated projection that carries the neural impulse toward the next neuron
35. A clear fluid that protects the brain and spinal cord and removes any waste products and monitors for internal change