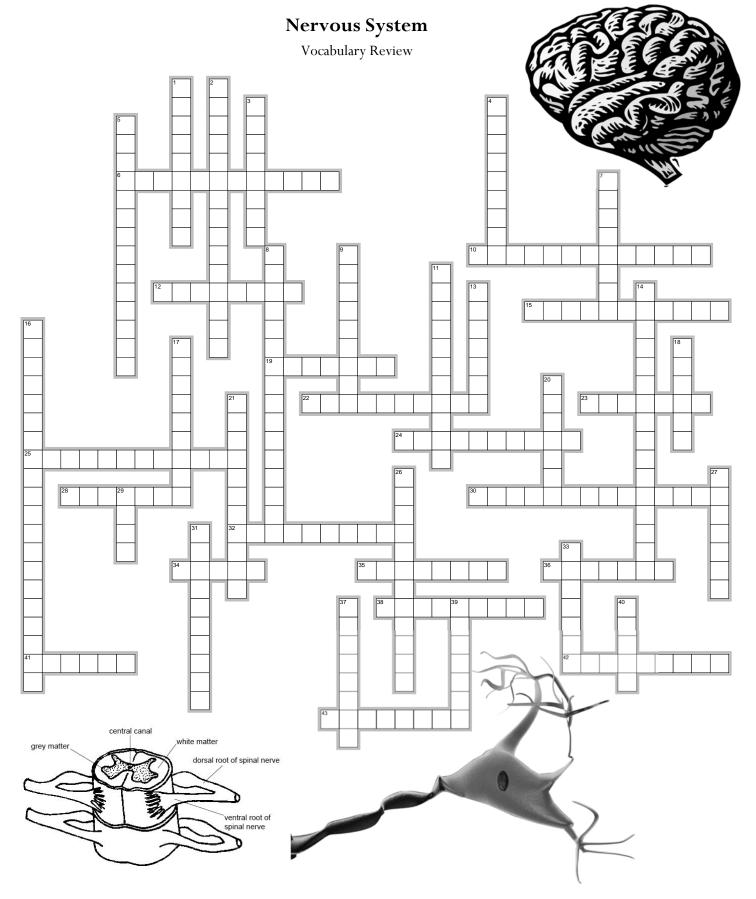
Biology 12

Human Biology

Name: \_\_\_\_\_

Per: \_\_\_\_ Date: \_\_\_\_



- 6. This membrane contains receptors for neurotransmitters to bind to.
- 10. Space between axon terminal and next neuron (2 words).
- 12. Largest portion of the brain, the central processing area.
- 15. These nerve cells are located entirely within the CNS.
- 19. The \_\_\_\_\_\_ potential is the "normal" state for a nerve fibre.
- 22. The cerebrum is separated into a left and right \_\_\_\_\_
- 23. Specialized cells that produce myelin.
- 24. Developed neural tube that is protected by vertebrae (2 words).
- 25. Constantly samples and responds to changes in the blood to maintain homeostasis within the body.
- 28. Part of the peripheral nervous system that we do have control over (i.e. voluntary).
- 30. The gaps between the myelin sheath of a nerve fibre (3 words).
- 32. This part of the system is comprised of two kinds of nerves responsible for collecting stimuli and conducting responses.
- 34. Main organ of the nervous system
- 35. Part of neuron that conducts impulses towards cell body.
- 36. This part of the system includes the brain and spinal cord.
- 38. The amount of a substance or stimulus required to cause an action potential.
- 41. When these gates open, the nerve fibre is depolarized.
- 42. Part of the peripheral system we have no control over (i.e. involuntary).
- 43. Part of neuron that contains the nucleus, which maintains the cell (2 words).

## Down

- 1. Hypothalamus is considered the connection between the nervous and endocrine systems as it is associated with the release of hormones from this gland.
- 2. Subdivision of autonomic nervous system that promotes a relaxed body state.
- 3. Often referred to as the "sorting center" as it directs impulses coming up the spinal cord to the appropriate region of the brain.
- 4. The "jumping" of an impulse from one node to another is referred to as \_\_\_\_\_\_ conduction.
- 5. Dense tissue that forms a bridge to conduct impulses from one side of the brain to the other (2 words).
- 7. The end of the reflex arc; can be either a muscle or a gland.
- 8. These chemicals diffuse across the synaptic cleft to either inhibit or excite the next neuron.
- 9. When these gates open, the nerve fibre is repolarized.
- 11. This division of autonomic nervous system which promotes active body functions ("fight-or-flight").
- 13. Long groove that separates the two halves of the cerebrum.
- 14. At the top of the spinal cord, part this structure is dedicated to reflex actions (e.g. hiccupping or vomiting) that are responses from internal stimuli (2 words).
- 16. Enzyme which breaks down acetylcholine.
- 17. Basic functional unit of the nervous system; begins at receptor and ends at effector (2 words).
- 18. Humans have 31 pairs of these nerves.
- 20. Technical name for a nerve cell.
- 21. This membrane contains calcium gates and is where the synaptic vesicles fuse.
- 26. Fatty tissue which covers some nerve fibers.
- 27. There are 12 pairs of these nerves extending from the brain.
- 29. Part of nerve cell that conducts impulses away from cell body.
- 31. Portion of brain that provides smooth movements of muscles and ensures the body can maintain its sense of balance and coordination.
- 33. Portion of the adrenal glands that releases adrenaline.
- 37. The CNS is protected from abrasion against the cranium and vertebrae by this set of three membranes.
- 39. These neurons conduct impulses to the spinal cord.
- 40. These neurons conduct impulses from the CNS to an effector.