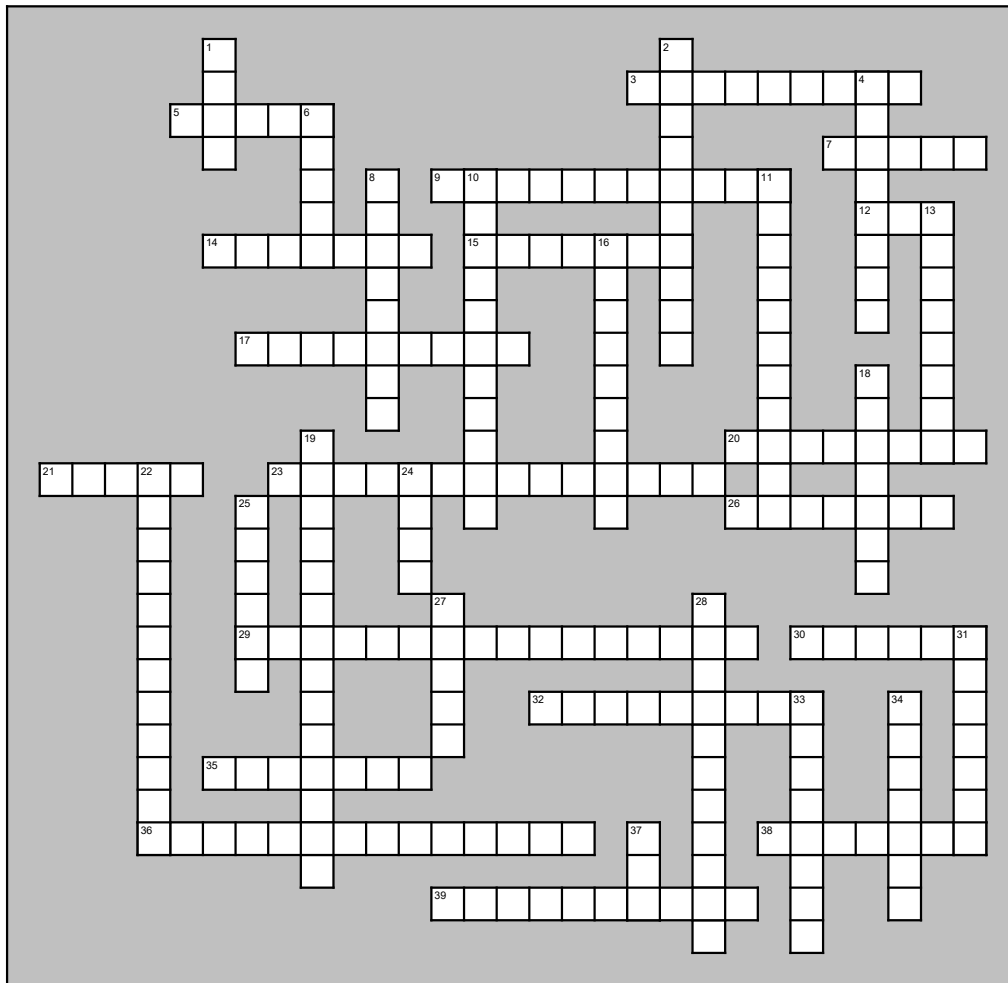


# Crossword



## Across

3. Valves (pulmonary and aortic) that allow blood to leave the ventricles.
5. Nervous output that causes a response in effector cells.
7. Upper heart chamber that receives blood.
9. The sending or \_\_\_ cell secretes a chemical neurotransmitter to cross the synaptic gap.
12. Deliver oxygen, carbon dioxide, waste. Abbrev.
14. Division of the nervous system including the brain and spinal cord.
15. The junction between a synaptic terminal of one neuron and the dendrites of another neuron (relay point).
17. Circuit that involves blood flow to the lungs for oxygenation.
20. Arteries that feed the heart.
21. Sodium-potassium \_\_\_ use energy from ATP to actively move the ions in and out of the neuron.
23. After the membrane potential reverses, the neuron returns to the resting potential.
26. Atria contract and blood flows into the ventricles.
29. Valves (one-way) that allow blood from the atria into the ventricles.
30. A nerve signal is called a(n) \_\_\_ potential. It is a rapid flip-flop of the membrane potential.
32. Receive signals from other neurons and convey the information to the cell body.
35. When the membrane potential (-70mv) has a slight negative charge inside the neuron and slight positive charge outside.
36. System that includes arteries, veins, and capillaries.
38. Comprised of a cell body, dendrites, and an axon.
39. Lower heart chamber that pumps blood from the heart.

## Down

1. Transmits signals to other cells; wrapped in myelin sheath from schwann cells with nodes to speed the signal along.
2. Division of the nervous system conveying information from the CNS to the body.
4. Carry blood FROM the heart.
6. The \_\_\_ side of the heart is for the pulmonary circuit of blood.
8. Ventricles contract and blood is pumped from the heart.
10. System that involves 3 phases of gas exchange (breathing, transport, and body cells).
11. System that facilitates exchange (gases, nutrients, waste) with all body tissues.
13. Respiration that produces ATP from glucose in all cells.
16. Blood clotting agents.
18. Nerve input that is received as stimuli occur.
19. A stimulus causes the neuron to reach or surpass threshold.
22. The receiving or \_\_\_ cell that allows the neurotransmitter to bind.
24. The \_\_\_ side of the heart is for systemic circulation of blood.
25. The action potential is \_\_\_ from dendrite to synaptic terminal and all-or-none.
27. Carry blood TO the heart.
28. Convey blood between arteries and veins with "beds".
31. System that communicates and coordinates with the endocrine system for body functions.
33. Circuit that carries oxygen-rich blood from the heart to the rest of the body.
34. Air sacs one cell thick for gas exchange in the lungs.
37. Fight disease and infection. Abbrev.