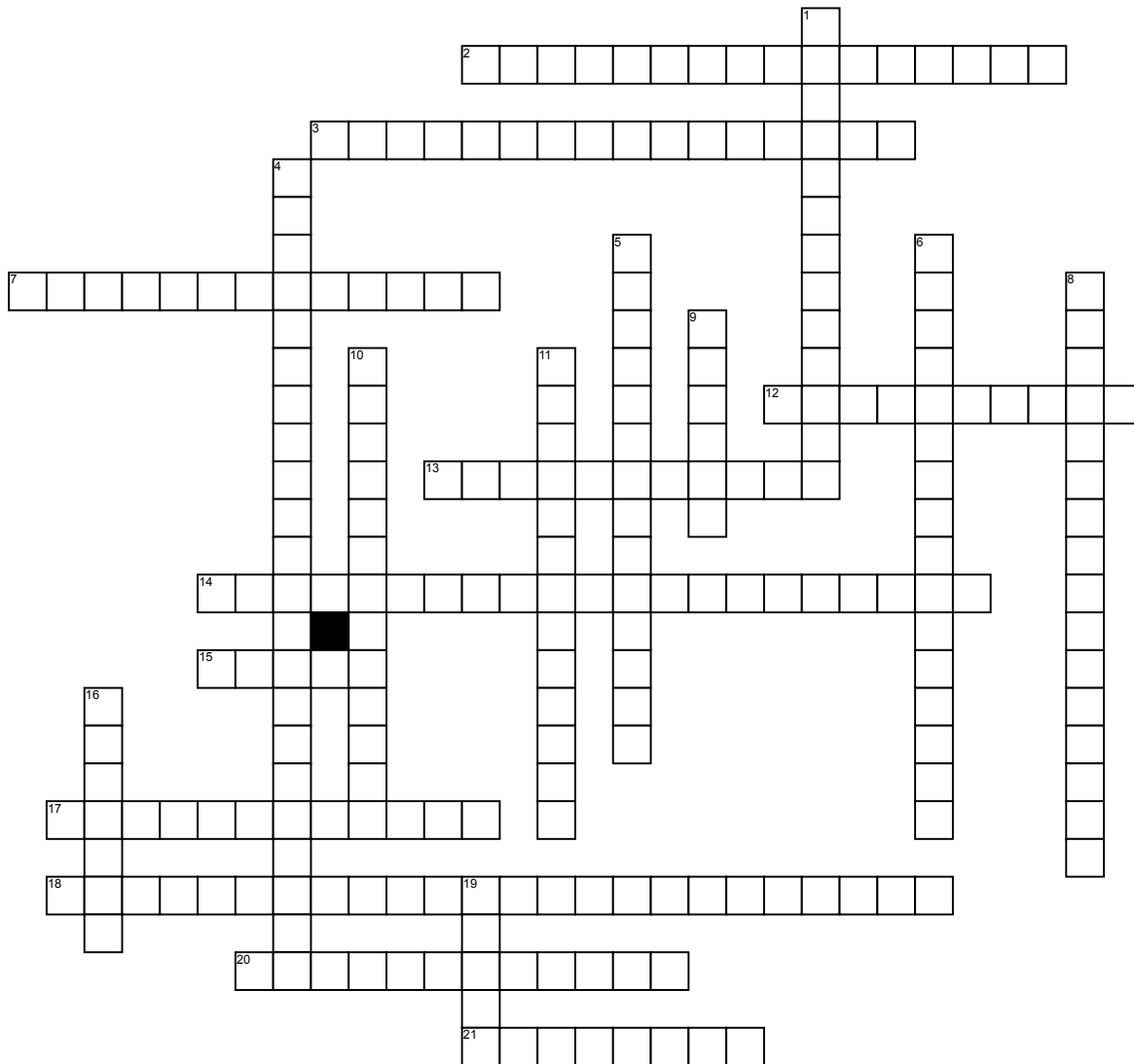


Blood Vessels



Across

2. The flow of blood from an arteriole to a venule (through a capillary bed)
 3. The process that provides all nutrient, excretory, and gas exchanges for a fetus
 7. Common in people who stand for long periods of time, pooling of blood in the feet and legs, inefficient venous return
 12. Feeds blood into the capillary beds in the tissues from the arteries
 13. Bulky middle layer, mostly smooth muscle and elastic fibers, controlled by the sympathetic nervous system, active in changing the diameter of the vessels
 14. Smooth muscle fibers that act as a valve to regulate blood flow into the capillary

15. Venules empty into _____ that then empty into the great veins (venae cavae) which go into the heart
 17. Lines lumen, interior wall of the vessels, thin layer of endothelium resting on basement membrane, decreases friction as blood flows through
 18. Drain the digestive organs and deliver this blood to the liver
 20. Blood returning to the heart
 21. Vessels that carry blood away from the heart

Down

1. Outermost tunic, composed of fibrous connective tissue, its function is to support and protect the vessels
 4. Surround the base of the brain, provides several routes for blood to get to the brain

5. Blood circulates inside the blood vessels, which form a closed transport system
 6. Veins draining the head and arms empty into _____.
 8. Veins draining the lower body empty into the _____.
 9. Prevent backflow of blood
 10. A vessel that directly connects the arteriole and venule at opposite end of a capillary bed
 11. Tiny interweaving capillaries that form a network of capillaries, where exchanges are made between blood and tissue cells
 16. Drains the capillary beds
 19. Largest artery of the body