

Chp.2 Review Biological

1. An extensive network of specialized cells that carry information to and from all parts of the body is called the _____.
2. The basic cell that makes up the nervous system and which receives and sends messages within that system is called a _____.
3. The long tube-like structure that carries the neural message to other cells on the neuron is the _____.
4. On a neuron, the branch-like structures that receive messages from other neurons is the _____.
5. The cell body of the neuron, responsible for maintaining the life of the cell and contains the mitochondria is the _____.
6. The fatty substances produced by certain glial cells that coat the axons of neurons to insulate, protect, and speed up the neural impulse is the _____.
7. The bundles of axons in the body that travel together through the body are known as the _____.
8. The charged particles located inside and outside of the neuron are called _____.
9. The state of the neuron when not firing a neural impulse is known as the _____.
10. _____ refers to the fact that a neuron either fires completely or does not fire at all.
11. The _____ are sack-like structures found inside the synaptic knob containing chemicals.
12. _____ are chemicals found in the synaptic vesicles which, when released, has an effect on the next cell.
13. The _____ neurotransmitter causes the receiving cell to fire.
14. The _____ mimic or enhance the effects of a neurotransmitter on the receptor sites of the next cell, increasing or decreasing the activity of that cell.
15. The _____ a long bundle of neurons that carries messages to and from the body to the brain that is responsible for very fast, lifesaving reflexes.
16. A neuron that carries information from the senses to the central nervous system and is also known as the afferent is called a _____.
17. All nerves and neurons that are not contained in the brain and spinal cord but that run through the body itself are in the _____ system.
18. The division of the PNS consisting of nerves that carry information from the senses to the CNS and from the CNS to the voluntary muscles of the body is the _____ system.
19. The _____ system division of the PNS consisting of nerves that control all of the *involuntary* muscles, organs, and glands sensory pathway nerves coming from the sensory organs to the CNS consisting of sensory neurons.
20. The part of the ANS that is responsible for reacting to stressful events and bodily arousal is called the _____ of the nervous system.
21. A machine designed to record the brain wave patterns produced by electrical activity of the surface of the brain is called an _____.
22. The part of the lower brain located behind the pons that controls and coordinates involuntary, rapid, fine motor movement is called the _____.
23. The part of the limbic system located in the center of the brain, this structure relays sensory information from the lower part of the brain to the proper areas of the cortex and processes

some sensory information before sending it to its proper area and is called the _____.

24. The larger swelling above the medulla that connects the top of the brain to the bottom and that plays a part in sleep, dreaming, left–right body coordination, and arousal is called the _____.
25. The _____ is an area of neurons running through the middle of the medulla and the pons and slightly beyond that is responsible for selective attention.
26. The _____ is a curved structure located within each temporal lobe, responsible for the formation of long-term memories and the storage of memory for location of objects.
27. The _____ is a brain structure located near the hippocampus, responsible for fear responses and memory of fear.
28. The _____ is the outermost covering of the brain consisting of densely packed neurons, responsible for higher thought processes and interpretation of sensory input.
29. The thick band of neurons that connects the right and left cerebral hemispheres is called the _____.
30. The section of the brain located at the rear and bottom of each cerebral hemisphere containing the visual centers of the brain is called the _____.
31. The sections of the brain located at the top and back of each cerebral hemisphere containing the centers for touch, taste, and temperature sensations is called the _____.
32. The _____ is the area of the cortex located just behind the temples containing the neurons responsible for the sense of hearing and meaningful speech.
33. The _____ are areas of the cortex located in the front and top of the brain, responsible for higher mental processes and decision making as well as the production of fluent speech.
34. The _____ glands secrete chemicals called hormones *directly* into the bloodstream.
35. The endocrine glands located on top of each kidney that secrete over 30 different hormones to deal with stress, regulate salt intake, and provide a secondary source of sex hormones affecting the sexual changes that occur during adolescence are called the _____.