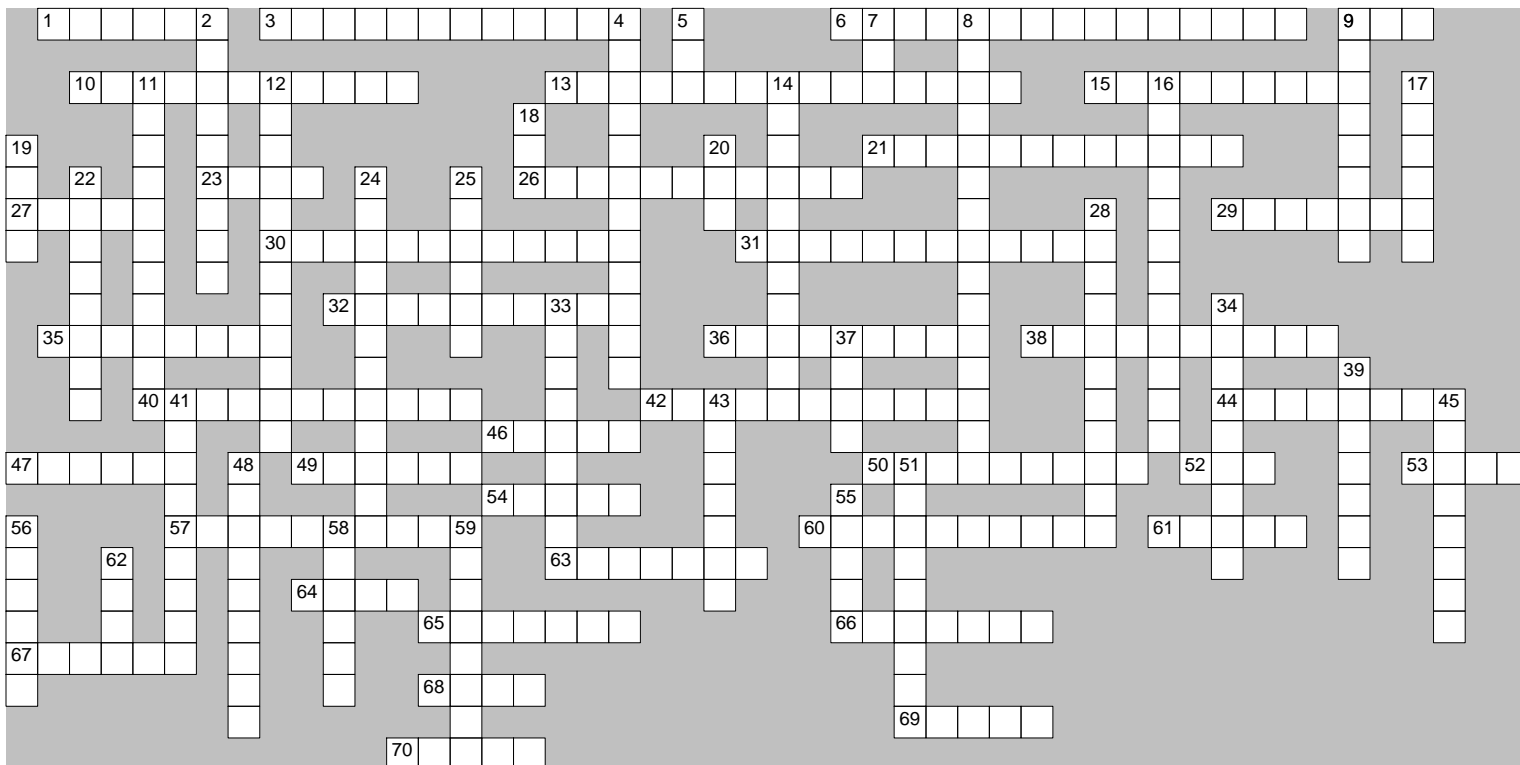


Exam 3 Study Puzzle



Across

1. term for the intermixing of spinal nerves in the cervical, brachial, lumbar and sacral regions
3. the space in which CSF circulates in the meninges
6. ANS division that is concerned with conservation and storage of energy
9. includes the brain and spinal cord
10. interneuron type that connects different regions of the cerebrum within the same hemisphere
13. the scientific term for the anterior pituitary
15. the neurohypophysis is also referred to as the ____ pituitary gland
21. the "link" between the endocrine and nervous system
23. this type of innervation (in which both divisions effect an organ) is utilized by the autonomic nervous system
26. term to describe the larger effect when two or more hormones work together
27. these cells of the pancreatic islets produce glucagon
29. a deep groove with dura mater extending into it
30. first letter of cranial nerves in order
31. a hormone that is secreted from a neuron but has endocrine effects is classified as a ____
32. this gyrus is also called the primary motor cortex
35. carriers of lipid soluble hormones are made of ____, which are water soluble
36. characteristic regions of the body surface that are innervated by spinal nerves
38. alcohol inhibits this portion of the brain
40. these neurons form the corpus colosum
42. term used to describe a pathway (reflex) that stays on the same side of the body
44. sensory input is this directional term
46. atrial natriuretic peptide is released by this organ
47. the "survival" system of the brain
49. "his" area of the brain is responsible for the motor aspect of speech
50. supporting cells of the nervous system
52. one of the hormones (initials) that is involved with control of blood calcium levels
53. a synapse may be excitatory or inhibitory, but never ____
54. this ventricle closely associated with the diencephalon
57. estrogen is an example of a ____ hormone, in that it "allows" progesterone to have a greater affect
60. ganglia of the ANS allow for a high level of ____
61. a bump on the brain surface
63. clumps of cell bodies, axon terminals and dendrites outside of the central nervous system
64. the nervous systems effects are fast, while the endocrine systems effects are ____
65. this sulcus separates the frontal from the parietal lobes
66. this gland consists of follicles that produce T3 and T4 hormones
67. the ____ root of the spinal cord contains sensory nerves
68. the cell type of the pancreatic islets that produce insulin
69. if a hormone is ____ soluble it will bind to intracellular receptors
70. if a hormone is ____ soluble it will bind to extracellular or membrane receptors

Down

2. intracellular signals that trigger additional effects are called ____ messengers, for ex. cAMP
4. made up of the epithalamus, thalamus and hypothalamus
5. hormone release by the kidneys in response to low oxygen levels (initials)
7. neurotransmitter (ab.) utilized by all ANS ganglia and secreted by the postganglionic neurons of the parasympathetic division
8. this tract starts in the spinal cord and ends in the cerebellum
9. contains the two largest hemispheres
11. this division of the autonomic nervous system increases energy use
12. insulin and glucagon are ____ hormones in that they have opposite effects
14. this gyrus is also called the somatosensory cortex
16. first letters of the function acronym for the 12 cranial nerves
17. these basal ____ are deep in the cerebrum and are involved with movement.
18. includes all neural matter outside the brain and spinal cord
19. the color of matter found in the cerebral or cerebellar cortex
20. the fragile layer of the meninges is the ____ mater
22. the space into which anesthetic is injected to block spinal nerve transmission
24. these functional cells of the nervous system are entirely within the central nervous system
25. a quick, automatic and predictable response to a stimulus
28. term for a gland such as the pituitary that is both endocrine and exocrine in nature
33. the ____ and inhibiting hormones of the hypothalamus control the anterior pituitary's endocrine cells
34. this sensory tract from cranial nerve I is linked to the limbic system and can invoke strong memories
37. anterior pituitary hormone (initials) that control part of the adrenal cortex
39. the parasympathetic division has its origin in the ____ and sacral nerves.
41. lobe which contains the visual cortex
43. motor division that controls skeletal muscle
45. the sympathetic division has its origins in the ____ and lumbar nerves
48. this area of the brain is named after a guy who figured out that it has everything to do with understanding communication
51. cell type that is involved with the creation of cerebrospinal fluid
55. number of cranial nerves
56. produce sex hormones
58. a shallow groove on the brain
59. motor output is this directional term
62. intermediate portion of the brain stem