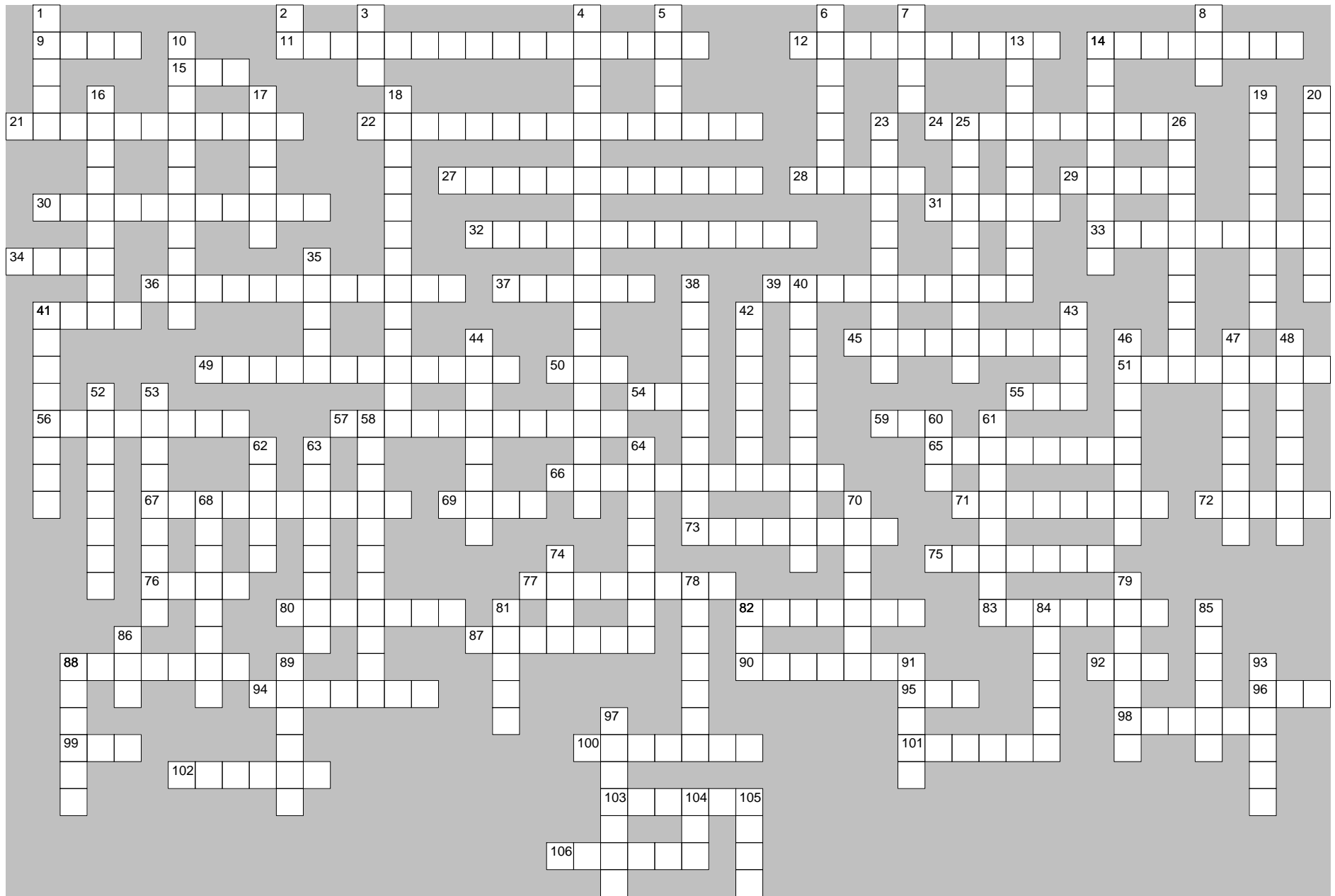


Physiology Final Exam Review Puzzle



Across

9. at the center of each porphyrin ring is this metal that binds oxygen
11. rapid breathing
12. these structures from the brush border
14. this ion moves opposite bicarbonate to ensure tonicity (osmotic balance) in red blood cells
15. this hormone increase production of RBC, thereby increasing oxygen transport capacity (abv)
21. a mineralocorticoid that causes obligatory water reabsorption in the kidney
22. division of the ANS responsible for erection
24. during the deglutition reflex this flap moves down and covers the trachea
27. the ability of sperm to fertilize is this process
28. this is one type of hemoglobin has a higher affinity for oxygen
29. erosion of the mucosal lining of the stomach causes this
30. scientific term for urination
31. an increase in CO₂, BPG, temp and acidity cause the hemoglobin-oxygen dissociation curve to shift in this direction
32. gland that produces alkaline secretion just before ejaculation
33. glucose, ____ and fructose are the three absorbable sugars
34. this type of transport is found in the apical membrane of intestinal cells and transports both Na and glucose (abv)
36. system required for population homeostasis
37. ovarian cycle phase dominated by the presence of the corpus luteum
39. these muscular bands control movement between regions of the GI tract
41. a ____ movement occurs as a result of gastrin on the ileocecal sphincter and colon
45. cell shrinking due to hypertonic conditions
49. epithelium of the ureters, bladder and part of the urethra
50. the region where the DCT meets up with the afferent arteriole and is involved in regulation of GFR (abv)
51. exchange of gases from the alveoli to blood is ____ respiration
54. the area in the pons responsible regulating and limiting length of inspiration (abv).
55. hormone produced by the posterior pituitary to increase facultative water reabsorption (abv)
56. group of accessory muscles for inspiration
57. the process of sperm becoming motile
59. medullary nuclei group responsible for inspiration (abv)
65. structure affected by FSH
66. most carbon dioxide is transported as this ion in plasma
67. location of maturation and storage of sperm
69. functions of the nasal cavity are to filter incoming air, humidify and ____ it as well.
71. a person with plasma pH of 7.1 would have
72. enzyme produced by the macula densa that converts angiotensinogen to angiotensin I
73. most abundant gas in atmosphere
75. process of sperm and egg merging both nuclear and cytoplasmic content
76. suffix that indicates an inactive enzyme
77. the first region of the small intestine
80. having the normal complement of chromosomes
82. hormone that increases stomach motility and gastric juice secretion
83. the smallest sacs in the respiratory tree where most exchange occurs
87. conduct urine from kidneys to bladder
88. this ____ layer of the GI tract (next to the lumen) is highly variable from mouth to anus
90. nerve that innervates the diaphragm
92. hormone that pregnancy tests look for (abv)
94. cell reproduction type that produces gametes
95. produced by the placenta and is thought to increase breast development during pregnancy (abv)
96. protein that causes an increase in testicular testosterone levels (abv)
98. alveolar type II cells are also known as ____ cells
99. gene on the Y chromosome that initiates gender determination (abv)
100. lack of this enzyme will render individuals that eat/drink dairy products very uncomfortable
101. normal breathing pattern
102. the final electron receptor, and one main reason for the respiratory system
103. cells that produce testosterone
106. oxygenated blood is ____ red

Down

1. this volume is the amount of air exchanged during normal quiet breathing
2. hormone that causes ovulation (abv)
3. this behavior actually has the added bonus of increasing genetic diversity!
4. the structure formed when carbon dioxide binds to hemoglobin
5. this gentleman figured out the relationship between volume and pressure... now there is a law!
6. lipids in a hydrophilic environment form these round structures
7. the ability of hemoglobin to alter its affinity for oxygen which occurs when there is a change in pH in plasma is the ____ effect
8. medullary nuclei group that contains the pacemaker cells (abv)
10. capillary type of the glomerular capillaries
13. these islets of ____ contain cells that release insulin and glucagon
14. this material prevents collapse of the trachea
16. the cells that surround the capillaries of the glomerulus
17. compound that was once used to determine plasma clearance rate
18. this gas is primarily responsible for controlling ventilation rates
19. this type of water is formed by dehydration synthesis reactions
20. arteriole associated with the glomerulus that has smaller diameter
23. the protein structure of hemoglobin
25. these chemoreceptors are outside the CNS, located in the carotid bodies
26. substance produced by the septal cells
35. produced by the goblet cells lining the trachea
38. the respiratory pigment used in red blood cells
40. childbirth term
41. condition of having only one sex chromosome
42. enzyme that once activated functions to activate more of itself as well as procarboxypeptidase and chymotrypsinogen
43. hypothalamic releasing hormone that causes the ant. pituitary to release the gonadotropins LH and FSH (abv)
44. produce hydrochloric acid
46. this hormone increases exocrine production from the pancreas
47. the pulmonary ____ carry deoxygenated blood
48. responsible for digestion in the colon are these little critters
52. this acid is formed by combining water and CO₂
53. if plasma clearance is higher than GFR, the ____ must be occurring
58. general term for the muscular contractions of the GI tract
60. this is autoregulated and ensures adequate blood flow through the glomerular capillaries (abv)
61. produces estrogen and progesterone even after the ovary has stopped producing them
62. the pulmonary ____ carry oxygenated blood
63. childbirth hormone that is in a positive feedback loop between cervix and post. pituitary
64. accessory digestive organ that is a heterocrine gland
68. exchange of gases from the blood to the peripheral cells is ____ respiration
70. the functional unit of the kidney
74. common name for these phagocytic cells of the alveoli
78. conducts urine from bladder to external environment
79. this nutrient should be 100% reabsorbed in the PCT, if not there is a "sweet overflow" of urine
81. deoxygenated blood is ____ red
82. hormone that inhibits gastric activity (abv)
84. the little blue pill - don't take if you have a heart condition
85. formed by union of sperm and egg
86. this hormone has been linked to activating the satiety center in the hypothalamus (abv)
88. the first phase of the uterine cycle
89. site of sperm production
91. the ____ cells produce pepsinogen
93. gentleman who determined each individual gas exerts a pressure independent of other gases present
97. having half the normal complement of chromosomes
104. hormone derived from testosterone (abv)
105. protective function of the GI tract may come from this (abv)