

Review Questions for Immune System:

1. *What is immunity?*
2. *What are the 2 branches of the immune system?*
3. *How do innate immunity and adaptive immunity differ?*
4. *What are the basic components of the innate branch?*
5. *How does skin repel pathogens?*
6. *What role does keratin play in repelling pathogens?*
7. *What role does sebum play in repelling pathogens?*
8. *What role does sweat play in repelling pathogens?*
9. *How do mucosae repel pathogens?*
10. *What role does mucus play in repelling pathogens?*
11. *What role do cilia play in repelling pathogens?*
12. *How do body fluids help provide innate defense?*
13. *What role does lysozyme play in repelling pathogens?*
14. *What is the benefit of harboring non-pathogenic organisms?*
15. *What WBCs provide innate defense?*
16. *What is diapedesis?*
17. *What is positive chemotaxis?*
18. *How do neutrophils provide innate defense?*
19. *What are macrophages? From what cell are they recently derived? From what cell are they ultimately derived?*
20. *What are the differences btwn free and fixed macrophages? What are examples of each?*
21. *What is phagocytosis?*
22. *What is a phagosome?*
23. *What is a lysosome?*
24. *What is opsonization? What proteins are capable of it and how does it affect phagocytosis?*
25. *How do basophils and mast cells provide innate defense?*
26. *How do eosinophils provide innate defense?*
27. *What are natural killer cells? What do they do?*
28. *What is interferon? Who makes it? What does it do?*
29. *What is complement?*
30. *Where are complement proteins normally found? Who makes them?*
31. *In what state do complement proteins usually exist? What activates them?*
32. *What are the 4 main things activated complement does?*
33. *What is a membrane attack complex?*
34. *When does inflammation occur?*
35. *What are the 5 cardinal signs of inflammation?*
36. *What are the causes of those 5 signs?*
37. *What are the primary inflammatory chemicals?*
38. *What are the benefits of inflammation?*
39. *What is a fever?*
40. *What causes a fever?*
41. *What are pyrogens?*

42. *What are the benefits of a moderate fever?*
43. *How does the adaptive immune system differ from the innate?*
44. *What are antigens? What are the difference btwn self, non-self, and foreign antigens?*
45. *What is an autoimmune disease?*
46. *What are the 2 types of specific immunity?*
47. *What are the main cell types of the specific immune system?*
48. *What are the 2 types of lymphocytes?*
49. *Where are lymphocytes born?*
50. *Where do B lymphocytes mature?*
51. *Where do T lymphocytes mature?*
52. *What is immunocompetence?*
53. *What are found on the cell membranes of immunocompetent lymphocytes?*
54. *What makes lymphocytes "specific?"*
55. *Where are most mature lymphocytes found?*
56. *What antigen presenting cells? What do they do? Examples?*
57. *What are class II MHC proteins? Where are they found? What role do they play in the immune response?*
58. *What activates a Helper T cell?*
59. *How is Helper T cell activation specific?*
60. *What is costimulation? Why is it necessary?*
61. *What do mature helper T cells do?*
62. *What do memory helper T cells do?*
63. *What are cytokines? What do they do?*
64. *What type of antigens does the antibody-mediated response deal with?*
65. *What is another name for the antibody-mediated response?*
66. *What lymphocyte is predominantly involved in the antibody-mediated response?*
67. *What is clonal selection? How does it start?*
68. *What role do Helper T cells play in clonal selection?*
69. *What are the 2 types of cells produced during clonal selection?*
70. *What do plasma cells do?*
71. *What do memory B cells do?*
72. *What are antibodies? What are some alternate names for antibodies? Who makes antibodies?*
73. *What is the structure of an antibody?*
74. *What is the function of an antibody's variable regions?*
75. *What is the function of an antibody's constant region?*
76. *What are the 5 classes of antibodies? How do they differ?*
77. *What are antibody's 4 main mechanisms of action?*
78. *What is precipitation?*
79. *How do antibodies cause lysis?*
80. *What is agglutination?*
81. *What is neutralization?*
82. *What is the primary function of the cell-mediated immune response?*
83. *What cells are involved in the cell-mediated immune response?*

84. *What are CD4 cells? CD8 cells?*
85. *What are class I MHC proteins? Where are they found? What role do they play in the immune response?*
86. *What types of cells are produced as a result of Killer T cell activation?*
87. *What do mature killer T cells do? What kinds of cells do they kill?*
88. *What are the differences btwn the primary and secondary immune responses?*
89. *What occurs during the lag period of the immune response?*
90. *What are the differences btwn active and passive immunity?*
91. *What are the differences btwn natural and artificial immunity?*
92. *What are examples of all 4 types of immunity?*
93. *What is a vaccination?*
94. *What do memory killer T cells do?*
95. *How would the response of a memory T cell differ from the primary response?*
96. *What are suppressor T cells? What do they do?*