**AP Biology Chapter 22 & 23 main points**

* 1. State the 2 major points Darwin made in *Origin of Species* concerning the earth's biota
  2. Comparane and contrast Plato'sphilosophy of idealism and Aristotle's *scala naturae*
  3. Describe C. Linnaeus'contribution to Darwin's theory of evolution
  4. Describe G. Cuvier's contribution to paleontology
  5. Explain how Cuvier and his followers used the concept of catastrophism to oppose evolution
  6. Explain how the principle of gradualism and C. Lyell's theory of uniformitarianism influenced Darwin's ideas about evolution
  7. Describe J. B. Lamarck's model for how adaptations evolve
  8. Decribe ho Darwin used his observations from the voyage of the HMs *Beagle* to formulate and support his theory of evolution
  9. Describe how Alfred Russel Wallace influenced Darwin
  10. Explain what Darwin meant by the principle of common descent and descent with modification
  11. Explain what evidence convinced Darwin that species change over time
  12. State 3 inferences Darwin gmade from his observations which led him to propose natural selection as a mechanism for evolutionary change
  13. Explain why variation is so important to Darwin's theory
  14. Explain how Thomas Malthus' essay influenced Darwin
  15. Distinguish between artificial selection and nataural selection
  16. Explain why the population is the smallest unit that can evolve
  17. Using some contemporary exmaples, explain how natural selection results in evolutionary change
  18. Explain why the emergence of population genetics was an important turning point fo evolutionary theory
  19. Describe the lines of evidence Darwin used to support the principle of common descent
  20. Describe how molecular biology can be used to study evolutionary relationships among organisms.
  21. State the 2 major points Darwin made in Origin of Species concerning the earth's biota
  22. Comparane and contrast Plato'sphilosophy of idealism and Aristotle's scala naturae
  23. Describe C. Linnaeus'contribution to Darwin's theory of evolution
  24. Describe G. Cuvier's contribution to paleontology
  25. Explain how Cuvier and his followers used the concept of catastrophism to oppose evolution
  26. Explain how the principle of gradualism and C. Lyell's theory of uniformitarianism influenced Darwin's ideas about evolution
  27. Describe J. B. Lamarck's model for how adaptations evolve
  28. Decribe ho Darwin used his observations from the voyage of the HMs Beagle to formulate and support his theory of evolution
  29. Describe how Alfred Russel Wallace influenced Darwin
  30. Explain what Darwin meant by the principle of common descent and descent with modification
  31. Explain what evidence convinced Darwin that species change over time
  32. State 3 inferences Darwin gmade from his observations which led him to propose natural selection as a mechanism for evolutionary change
  33. Explain why variation is so important to Darwin's theory
  34. Explain how Thomas Malthus' essay influenced Darwin
  35. Distinguish between artificial selection and nataural selection
  36. Explain why the population is the smallest unit that can evolve
  37. Using some contemporary exmaples, explain how natural selection results in evolutionary change
  38. Explain why the emergence of population genetics was an important turning point fo evolutionary theory
  39. Describe the lines of evidence Darwin used to support the principle of common descent
  40. Describe how molecular biology can be used to study evolutionary relationships among organisms