1. Give a brief biography of Darwin and his voyage on the Beagle.
2. Evolution consists of two main ideas:
	1. Common Ancestry:
	2. Descent with modification:
3. Describe how the following scientists influenced Darwin
Hutton/Lyell -

Malthus -
4. Describe the difference between Darwin’s theory of evolution via Natural selection and Lamarck’s theory of evolution via acquired traits.
5. What is a population?
6. What is a gene pool?
7. Define gene frequency.
8. Define Microevolution.
9. Define Macroevolution.
10. Describe the main differences between Micro and Macroevolution.
11. What is a mutation?
12. What are the four types of mutations?
13. Are mutations always good or bad?
14. Define Natural Selection.
15. What three things are needed for natural selection to occur?
1. 2. 3.
16. Variation within a population is caused by what three things?
1. 2. 3.
17. Define Fitness.
18. Who is more fit, the woman who participated in a triathlon or the mother with 6 kids.
19. What is an adaptation?
20. Give three examples of an adaptation.
21. Define and given an example of artificial selection.
22. Define and give an example of sexual selection.
23. Define Gene flow/migration.
24. Define Genetic Drift.
25. What are two examples of Genetic Drift?
26. What is a bottleneck event?
27. Give some possible examples of a bottleneck event?
28. What does a bottleneck event do to genetic diversity of a population?
29. What is the founder’s effect?
30. The four pieces of evidence for Evolution are?
1. 2. 3. 4.
31. Homologous, analogous, and vestigial structures are all part of what type of evidence for evolution.
32. What is a homologous structure?
33. What is an analogous structure?
34. What is a vestigial structure?
35. Describe the difference between a homologous structure and an analogous structure.
36. How does embryology provide evidence for evolution?
37. What is the geological law of superposition and how does it support evolution?
38. What is a fossil?
39. What is a transitional fossil?
40. How does molecular biology provide evidence for evolution?