

Name _____ Period _____ Date _____

Unit 7 Essential Questions

- 1) What is the name of the book Charles Darwin published in 1859?
- 2) Where did Darwin make most of his observations?
- 3) Darwin main two point in his book:
 - a)
 - b)
- 4) Define natural selection –
- 5) What is the difference between microevolution and macroevolution?
- 6) A _____ is a group of the same kind of organisms that can breed with each other and produce fertile offspring.
- 7) A population is a group of _____ of the same species living in the same area.
- 8) What is a heritable trait?
- 9) What are the 4 main tenants of Natural Selection?
 - a)
 - b)
 - c)
 - d)

- 10) Why is overproduction of offspring important to natural selection?
- 11) Define variation –
- 12) How does variation in phenotype effect an organism?
- 13) How do adaptations occur?
- 14) What does survival of the fittest mean?
- 15) Explain decent with modifications.
- 16) What are the four truths that show all life is genetically related to life from the past?
 - a)
 - b)
 - c)
 - d)
- 17) What is the difference between asexual and sexual reproduction?
- 18) What are the benefits of asexual reproduction?
- 19) What are the disadvantages of asexual reproduction?
- 20) What are the benefits of sexual reproduction?
- 21) The study of the locations of organisms around the world is called _____.
- 22) What is geographical isolation?

23) Define embryology –

24) How is embryology evidence of evolution?

25) Define homologous structures.

26) Give 2 examples of homologous structures

a)

b)

27) Define analogous structures.

28) Give 3 examples of analogous structures.

a)

b)

c)

29) What is a vestigial structure?

30) Paleontology is the study of the _____.

31) Biochemistry can be used to support biological evolution by determining that all life has 2 things in common:

a)

b)

32) When is biochemistry used to determine evolutionary relationships among species?

33) Define allele frequency –

34) What is speciation and when does it occur?

35) Name a driving force in natural selection.

36) Define gradualism –

37) Explain an example of gradualism.

38) What is punctuated equilibrium?

39) Explain the difference between divergent evolution and convergent evolution.

40) Define coevolution and provide 2 detailed examples:

a)

b)

41) What is the difference between gradual extinction and mass extinction?

42) How does genetic drift effect a population?

43) Explain gene flow.

44) What is the founder effect?

45) What is the bottleneck effect?

46) What are the 5 conditions needed for genetic equilibrium to occur?

a)

b)

c)

d)

e)

47) What do phylogenies show and what is the most common way to display them?

48) What is taxonomy?

49) How are organisms classified?

Domain - _____ - _____ - Class – Order - _____ - Genus – Species

50) What does a cladogram show?