

Name _____ Date _____ Period _____

STUDY GUIDE – CHAPTERS 22-24

Multiple Choice & Numerical Fill-In Topics (71 points)

- Darwin's theory of evolution
- LaMarck's theory of evolution
- homologous structures
- analogous structures
- artificial selection
- resistance genes
- unity and diversity of life
- convergent evolution
- adaptive radiation
- age of rock layers
- how to read an evolutionary tree
- extinct vs. extant species
- base-pair mutations
- chromosomal mutations
- biological species concept
- Hardy-Weinberg equilibrium
- founder effect
- vestigial organs
- bottleneck effect
- genetic drift
- gene flow
- sexual selection (inter/intra)
- sexual dimorphism
- stabilizing selection
- directional selection
- disruptive selection
- heterozygote advantage
- frequency-dependent selection
- diploidy
- 5 pre-zygotic barriers
- 3 post-zygotic barriers
- hybrid zone
- allopatric speciation
- sympatric speciation
- gradualism vs. punctuated equilibrium

Free Response Topics (38 points)

- phylogenetic trees
- Darwin's theory of natural selection
- evidence of evolution
- genetic variation
- examples of genetic drift
- sympatric vs. allopatric speciation
- gradualism vs. punctuated equilibrium

