

EXAM EXPECTATIONS
AP Biology
“Speciation & Systematics”

OUTLINE outgroups
OUTLINE hybrid zones
OUTLINE complete dominance
OUTLINE acquired characteristics
OUTLINE shared primitive traits
OUTLINE shared derived traits
OUTLINE the roles that different isolating mechanisms play in speciation
OUTLINE the different postzygotic barriers
OUTLINE the different prezygotic barriers
OUTLINE gel electrophoresis
OUTLINE the most common method used to separate restriction fragments
OUTLINE PCR and its importance
OUTLINE why plasmids are important to the biotech industry
OUTLINE DNA replication
OUTLINE how and why muscle cells and nerve cells are different
OUTLINE how homologous chromosomes differ from one another
OUTLINE evolutionary fitness
OUTLINE exaptations
OUTLINE adaptive radiation
OUTLINE hybridization
OUTLINE convergent evolution
DESCRIBE punctuated equilibrium
DESCRIBE speciation
DESCRIBE mitosis
DESCRIBE meiosis
DESCRIBE enzymes and their roles
DESCRIBE how pesticide or antibiotic resistance forms in a population
DESCRIBE natural selection
IDENTIFY a genus or species name based upon italicized font and the presence/absence of capital letters
IDENTIFY examples of adaptations and exaptations from written narratives
IDENTIFY potential outgroups from a phylogenetic tree
IDENTIFY mono, para and polyphyletic groups from cladogram
COMPARE cladogenesis and anagenesis
COMPARE sympatric and allopatric speciation
COMPARE convergent and divergent evolution
COMPARE adaptations and exaptations
COMPARE the molecular genetics (DNA replication, chromosomes, protein synthesis) of prokaryotes and eukaryotes