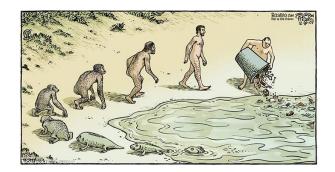
# **APESreview Ch 3-4: Ecosystems & Evolution**



### **Top 15 Terms for This Exam**

Biogeochemical Cycles Keystone Species Niche Tragedy of the Commons Mass Extinctions Gene Flow Trophic Levels Species Richness Adaptive Radiation Indicator Species Limiting Factor Principle Laws of Thermodynamics Introduced Species Convergent Evolution Gaia Hypothesis

## The Gimme Question for This Exam

The largest extinction in earth's history occurred during which time perioda. permianc. cretaceousb. precambriand. cenozoic

#### Video Review Links

Ecosystems Nitrogen & Phosphorus Cycles History of Life on Earth Feedback Loops <u>Trophic Levels</u> <u>Hydrologic & Carbon Cycles</u> <u>Trophic Structure</u>

#### **College Board Objectives**

ERT-1.D. Explain the steps and reservoir interactions in the carbon cycle.
ERT-1.E. Explain the steps and reservoir interactions in the nitrogen cycle.
ERT-1.F. Explain the steps and reservoir interactions in the phosphorus cycle.
ERT-1.G. Explain the steps and reservoir interactions in the hydrologic cycle.
ENG-1.A. Explain how solar energy is acquired and transferred by living organisms.
ERT-1.B. Explain how energy flows and matter cycles through trophic levels.
ENG-1.C. Determine how the energy decreases as it flows through ecosystems.
ENG-1.D. Describe food chains and food webs, and their constituent members by trophic level.
ERT-2.A. Explain levels of biodiversity and their importance to ecosystems.
ERT-2.D. Describe island biogeography.
ERT-2.E. Describe the role of island biogeography in evolution.

*ERT-2.H. Describe how organisms adapt to their environment. ERT-3.A. Identify differences between generalist and specialist species. EIN-2.A. Explain the concept of the tragedy of the commons. STB-4.H. Explain the causes and effects of ocean acidification.* 

(ENG=Energy Transfer, ERT=Interactions Between Earth Systems, EIN=Interactions Between Species and the Environment, STB=Sustainability)