

EXPECTATIONS

AP Biology

“Unit One- C Level”

STATE properties of living organisms
STATE that plants convert solar energy into chemical energy using carbon dioxide and water
STATE the ultimate source of energy for ecosystems and living organisms
STATE the lowest level of biological organization that can carry out all of the functions needed to live
STATE the type of feedback in labor contractions
STATE the type of feedback in blood glucose regulation
STATE the reason for photosynthetic organisms being found the surface of water
STATE the average salinity of marine biomes
STATE the source of most of the atmosphere's oxygen
STATE the most important factor(s) determining the distribution of biomes
STATE the seasons when turnover occurs in temperate lakes
STATE that the boundaries of biomes is not distinct
STATE the pattern of species richness as you move from the north pole to the south pole
STATE the fundamental difference between matter and energy
STATE the ecosystem that accounts for the largest net primary productivity on earth
STATE the ecosystem that accounts for the largest net primary productivity per meter cubed on earth
STATE the equation for net productivity
STATE the maximum number of links in a food chain
STATE the zone in which phytoplankton can be found
STATE the reason for the poles being colder than the equator
STATE the relationship between water temperature and dissolved oxygen
STATE the temperature in Celsius where water is most dense
STATE the cause of earth's seasons
STATE the approximate number of species on earth
STATE how the ocean accounts for the largest net primary productivity on earth, yet per meter its productivity is low
STATE the organisms that fix nitrogen in aquatic ecosystems
STATE the organisms that fix nitrogen in terrestrial ecosystems
STATE the trophic level with the greatest biomass (in general)
STATE the roles of: Rhizobium, nitrifying bacteria, denitrifying bacteria and nitrogen fixing bacteria in the nitrogen cycle
STATE the relationship between hours of sunlight and latitude
STATE the relationship between two species of barnacles: *Balanus* and *Chthamalus*
STATE the relationship between termites and protozoans that live in their gut
STATE the names of organisms that can convert organic compounds into carbon dioxide
STATE how some ecosystems can have inverted pyramids of biomass
DEFINE population
DEFINE community
DEFINE ecosystem
DEFINE biosphere
DEFINE hypothesis
DEFINE theory
DEFINE quantitative and qualitative data
DEFINE a controlled experiment
DEFINE thermocline
DEFINE convergent evolution
DEFINE mutualism, predation, commensalism, competition and parasitism
DEFINE dominant species
DEFINE trophic efficiency
DEFINE eutrophication
DEFINE potential and kinetic energy
DEFINE negative and positive feedback
DEFINE species richness

DEFINE habitat
DEFINE biomass and standing crop
DEFINE primary and secondary production
DEFINE niche
DEFINE photoperiod
DEFINE the competitive exclusion principle
LIST the hierarchy of biological organization from least to most complex
LIST 2 major processes of ecosystems
LIST important abiotic factors in ecosystems
LIST important biotic factors in ecosystems
LIST characteristics of estuaries
LIST characteristics of aquatic biomes
LIST characteristics of biomes in general
LIST characteristics of each specific biome
LIST examples of cryptic coloration
LIST examples of aposematic coloration
LIST examples of Batesian mimicry
LIST examples of Mullerian mimicry
LIST ways that animals defend themselves against predation
LIST ways that plants defend themselves against predation
LIST examples of mutualism, predation, commensalism, competition and parasitism
LIST characteristics of ecological disturbances
LIST examples of primary and secondary succession
LIST most important decomposers in an ecosystem
LIST most important producers in an ecosystem
LIST factors that most effect primary productivity
LIST sequences/steps in the following biogeochemical cycles: water, carbon, nitrogen, phosphorous
LIST characteristics of each aquatic zone
LIST 2 components of species diversity
LIST 2 factors that effect a community's evapotranspiration