EXAM EXPECTATIONS
AP Biology
"Unit Three C Level"

STATE why blood flow is slowest in the capillaries
STATE a direct result of depolarization
STATE how fluid is forced out of the capillaries at the arteriole end
STATE the role of calcium in muscle contractions
STATE a common feature found in all respiratory systems
STATE the location of neurotransmitters
STATE the most important structural feature of tissues that line surfaces that exchange materials
STATE the ultimate source of energy for organisms
STATE that lungs, kidneys, skin and intestines have exchange surfaces
STATE the process by which neurotransmitters are released
STATE the adaptive benefits of a fusiform body shape
STATE why glycolysis is considered to be an ancient metabolic pathway
STATE the consequence of lacking integration centers
STATE the location and role interstitial fluid in animals
STATE that all animals have extracellular fluid that bathes their cells
STATE how/why air rushes into lungs during inhalation (human)
STATE the functions of sodium potassium pumps
STATE how inhalation occurs in negative pressure breathing
STATE the most important difference between "small" cells and "large" cells
STATE the products and reactants of cellular respiration
STATE the products and reactants of photosynthesis
STATE where air breathing insects carry out gas exchange
STATE the blood gas change that forces you to breathe when you try to hold your breath
STATE why cells of a multicellular must be bathed in extracellular fluid
DEFINE anabolic and catabolic pathways
DEFINE fermentation
DEFINE convergent evolution
DEFINE endocytosis and exocytosis
DEFINE threshold potential
DEFINE hypothesis
DEFINE homeostasis
DEFINE sympathetic and parasympathetic nervous systems
DEFINE sensation
DEFINE perception
DEFINE hemolymph
DEFINE closed and open circulatory systems
DEFINE controlled experiments
LIST three general functions of the nervous system
LIST the type of respiratory systems found in different organisms (from powerpoint)
LIST the steps of synaptic transmission
LIST similarities of adhesion, cohesion and surface tension
LIST changes that would observe under a microscope during a muscle's contraction
LIST similarities between hemoglobin and hemocyanin
LIST the steps of the sensory pathway in order
LIST the steps of the action potential
LIST respiratory surfaces that have capillary beds
LIST the different receptors and the stimulus they detect
LIST ways in which negative and positive feedback differ
LIST the most important factors that affect the distribution of biomes
LIST the two most fundamental processes of ecosystems
LIST reasons why gas exchange is more challenging for aquatic organisms
LIST the components of thin filaments in muscle cells
LIST differences between the extracellular fluid and blood in active muscle cells
LIST traits of hemoglobin