EXAM EXPECTATIONS
MYP Biology
"Unit One"

STATE the molecule that serves as "cellular gasoline"
STATE the number of species of earth
STATE that active transport requires ATP as a source of energy
STATE that active transport is necessary for nerves to function properly
STATE that all plasma membranes have a similar structure and similar functions
STATE that natural selection is the process by which adaptations arise in populations
STATE that structure dictates function
DEFINE concentration gradient
DEFINE solutes and solvents
DEFINE polar and nonpolar molecules
DEFINE hydrophilic and hydrophobic
DEFINE theory
DEFINE prokaryotes
DEFINE facilitated diffusion
DEFINE pinocytosis and phagocytosis
DEFINE diffusion
DEFINE osmosis
DEFINE hypothesis
DEFINE selective permeability
LIST examples from the powerpoint of substances that can and con not pass through membranes
LIST the three domains
LIST the properties of life
LIST the hierarchy of life from atoms to the biosphere
LIST 4 features found in all cells
LIST 3 steps in cell communication
LIST an example of negative and positive feedback
LABEL the level of biological hierarchy from an illustration
IDENTIFY a step in the scientific method from a given scenario
IDENTIFY the ultimate source of energy for ecosystems
IDENTIFY a control group from experimental groups in a given scenario
IDENTIFY basic life functions or common cellular activities from a list of choices
IDENTIFY groups in each of the three domains
OUTLINE the selective permeability of plasma membranes
OUTLINE the purpose of plasma membranes
OUTLINE the composition of internal and external environment of all cells
OUTLINE homeostasis
OUTLINE negative and positive feedback
OUTLINE the reactants (inputs) and products (outputs) of cell respiration
OUTLINE the reactants (inputs) and products (outputs) of photosynthesis
DESCRIBE a controlled experiment
COMPARE active transport and passive transport
COMPARE facilitated diffusion and diffusion
COMPARE concentration and membrane potentials
COMPARE taxis and tropisms
COMPARE regulators and conformers
EXPLAIN the role of a controlled experiment
EXPLAIN the types of hypotheses that science is able to test and those they can not test
EXPLAIN why all cells are small
EVALUATE a machine that carries out reverse osmosis and SUGGEST a solution to a given problem
EVALUATE the strengths and weaknesses of a scientific experiment
PREDICT predict the net movement of water across a semi-permeable membrane
CALCULATE surface area and volume of a cube