Biology 11 Student Achievement Record

Edited Sept. 2 '21

Name: _____

The following outcomes must be achieved (understanding proven) to allow for success in the course. Make sure to check off all outcomes you have achieved and write notes in your notebook for ones you have not achieved that will assist you in proving them later.

Achieved	Outcome
Unit 1: The Cell	
	1: I can explain what the term 'living' means by describing the 8 characteristics of life and can use those characteristics to prove that a given organism is living.
	2: I can explain how the idea of spontaneous generation became discredited (disproved) through the results found in the studies of Redi, Needham, Spallanzani and Pasteur.
	3: I can state the three components of cell theory and can briefly explain how each component was generated through the research of Hooke, Van Leeuwenhoek, Schleiden, Schwann and Virchow.
	4: I can identify types of cells based on parts that are present or absent. (Prokaryote vs. Eukaryote/Animal vs. Plant)
	5: I can identify and explain the contributions of the following cell components: cell wall, cell membrane, nucleus, chromosomes, chloroplast, ribosomes, mitochondria, cytoplasm, centrioles, endoplasmic reticulum and flagellum/cilia.
	6 (Lab): I can use a microscope to properly prepare and stain a slide, focus the microscope, and complete a biological drawing.
	7: I can explain the function of the cell membrane and can explain how the structures (lipid bilayer, carbohydrate chain, and protein channel) assist in its functioning.
	8: I can explain how molecules move into and out of the cell using active and passive transportation and can explain the difference between the processes of diffusion and osmosis.
	9: I can explain the purpose of photosynthesis and can identify both the reactants required, and the products produced for both steps of the process (light-dependent reactions and Calvin cycle).
	10: I can explain the purpose of cellular respiration and can identify the reactants required and products produced for all 3 steps of the process (glycolysis, Krebs cycle and ETC).
Unit 2: Biodiversity	
	11: I can explain how Linnaeus named and classified organisms using his hierarchical system of 7 taxa (binomial nomenclature) and can explain how it is used today.
	12: I can explain how the criteria used to classify organisms today has changed from Linnaeus's time.
	13: I can answer questions about the relationships between two organisms based on their taxa or where they reside on a cladogram. I can also use a dichotomous key to correctly identify and name organisms.
	14: I can identify major characteristics for each of the 6 Kingdoms (number of cells, cell type, outer cell structure, mode of nutrition, human/ecological impacts) and can give an example for each.
	15: I can identify and explain the importance of bacteria for human uses as well as their impact on all life on Earth
	16: I can explain the evolutionary path of plants towards increasing complexity and biodiversity over time and can identify characteristics that differ between each phylum.
	17: I can explain the evolutionary path of animals towards increasing complexity and biodiversity over time and can explain the difference between a simple animal and a complex animal with examples.
	18 (Lab): I can identify the phyla of a variety of plant and animal specimens and can give justification based on their observable characteristics.
	19: I can identify the structural components that make up a virus and can explain why viruses do not meet all 8 characteristics of a living thing.
Unit 3: Human Physiology	
	20: I can explain what homeostasis is and can explain how the process works given a specific example of a simple feedback loop.
	21. I can describe and explain the function of the circulatory system as well as its major parts (heart, blood vessels and blood) and can give an example of how it maintains homeostasis.
	22: I can explain the purpose of the respiratory system and can give an example of how it maintains homeostasis. I can also explain how the diaphragm works to assist with breathing (inhalation & exhalation).
	23: I can trace the flow of deoxygenated and oxygenated blood through the circulatory system and can explain how gases (O_2 and CO_2) are exchanged within the lungs.
	24: I can explain the purpose of the digestive system and can explain how it assists with homeostasis. I can also identify the difference between mechanical and chemical digestion.

	25: I can trace the pathway of food through the alimentary canal, including explaining what happens within each organ and can identify the importance and purpose of some auxiliary organ.
	26: I can explain the purpose of the excretory system and can explain how it assists with homeostasis. I can also trace the pathway of urea from a cell and out the body through the urinary track.
	27: I can identify at least one disorder of the following systems: circulatory, respiratory, digestive, and excretory. I can also explain the cause(s) of these disorders and how they affect the system in question.
	28 (Lab): I can show that I am able to properly identify and use the lab dissection instruments.

Extension Work:

The following material should not be completed unless you have met the essentials above for each unit. These outcomes are above your passing mark and will only be applied if all essential outcomes are achieved.

Name of Extension Entry (test, lab report, assignment, etc…)	**Mark Achieved**	**Value Entry out of**
Totals =		
Percentage (divide 2nd number into 1st number and X 100)=		
% towards overall mark (multiply above % by 20%) =		

- **I have achieved all my essential outcomes** **60%**

- **Value in last box above** **+ _____%**
  (remember this can only be applied if essentials are done)

Total = _____%

(Unknown value of 20% exam added in if essentials are achieved)