Self – Assessment: H.S. Structure and Function (chap 1 - 5)

Before the summative assessment (the test), I would like to do a quick temperature check on your understanding of relationships between structure and function in organisms (i.e. Specific DNA → specific Protein, hierarchical organization of interacting systems, Homeostasis through negative feedback loop). Answer honestly and add details as needed so I can better assist you. Please refer to the result of your *structure and function quiz* result to help you with the self-assessment.

Where is your learning at?

Mastery (Green Light) – I can explain the concept to another student in class.
Intermediate (Yellow Light) – I know it but it will be hard for me to teach another person because I am not clear on certain parts. I will leave a comment regarding what is still unclear.
Novice (Red Light) – I am lost. I cannot explain the concept at all. I will leave a comment.

NGSS	I am able to ……	M	I	N
HS-LS1-2.	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. (Be able to explain and visualize how different tissues and organs in the system work together)			
	Middle school review • Define biology & define characteristics of living • State and describe properties of water that sustain life • Describe four basic macromolecules that make up the basic cell (including chemical make up of each macromolecule) • Draw a basic cell (parts and function) – animal, plant, & bacterial • Build a model of a specific type of cell (i.e. neuron, RBC, WBC, muscle, adipose) • Classify four major types of tissues and their function in the human body systems & Classify three major types of plants tissues and their function in plant system.			
HS-LS1-3.	Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. - Explain four major negative feedback mechanisms in the human body (Ca+2, water, glucose, and temperature). - Conduct a simulated experiment with glucose feedback mechanisms (Science takeout – keeping balance)			
	Middle school review: • Cell transport: Explain how are molecules move into and out of cell membrane and state the importance of cell transport (passive vs active transport) in terms of homeostasis o Osmosis: Explain how water move into and out of a permeable membrane and state the importance of keeping dynamic equilibrium of water in cell in relation to different concentration of solute outside the cell (i.e. hypertonic, hypotonic, and isotonic solutions) • pH: Describe pH and importance of keeping a stable pH in cells (especially in terms of protein denaturation).			

Science and Engineering Practices
1. Asking questions (for science) and defining problems (for engineering) 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking 6. Constructing explanations (for science) and designing solutions (for engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating, and communicating information

Comments:

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Teacher Action: _____

Quiz (Formative Assessment) Score: _____ %

Test (Summative Assessment) Score: _____ %