

Name: _____ Date: _____ Period: _____

MACROMOLECULES PROJECT

There are several ideas for projects listed at the bottom of this paper. You are to choose any **one** idea and complete them in 1 week from receiving the assignment. The project is worth 20 points. **ALL projects must include all vocabulary words listed under Biology Concepts.**

<p>Create a 3D structure of the four different types of macromolecules. The structure does not have to include the individual atoms of the molecule but just the major monomer connected to each other. You can use repeating blocks of "small" items to build your macromolecule. The macromolecules must be labeled (with individual parts such as Phosphate - nitrogenous base - ribose). Functions of the macromolecules must be included</p>	<p>Create a song or rap about the macromolecules. You must have at least 3 verses and a beat. You must hand in a recorded version as well as a written version</p>	<p>Create a children's book about the macromolecules, water, vitamins and minerals in our body. Make sure you include illustrations, definitions and make it easy enough to be understood by an elementary age student.</p>
<p>Create a Youtube video describing the four different types of macromolecules regarding the structure and function. You MUST be in the video and cannot be based on a power point presentation.</p>	<p>Write a letter (2 pages typed or 4 pages handwritten) as if you are a nutritionist writing to a patient about living a healthier lifestyle. Include the necessary biological molecules that your patient needs to keep his/her body in homeostasis.</p>	<p>Create a comic for the macromolecules. This comic should explain in detail each molecule and include pictures as examples for each one and pictures of the structure. Function of each molecule must be included. The different macromolecules could be the characters in your comic book. Try Comic Life as an App</p>

	0	1	2	3	4	5
Analogy Creativity and overall design	Not completed	Minimal effort in design	Design is still lacking the minimal requirements.	An average design. Minimum requirements met.	Exceeding the minimal requirements. Demonstrated good design.	Demonstrated a very creative and original design.
	0	2	4	6	8	10
Structure and function of your macromolecules	Not completed	Minimal understanding	Lack of function and structural understanding	Structures and function are present but with error	Most structures and function are correct	All are correct

Biology Concepts that must be included:

H-bonding
Organic molecule
Macromolecule
Monomer
Polymer
Carbohydrate
Monosaccharide
Polysaccharide

Protein
Peptide bond
Amino acid
Lipid
Starch
Glycogen
Cellulose
Saturated
Unsaturated

Trans fat
Glycerol
Fatty Acids
Nucleic Acids
Nucleotides
Phosphate
Ribose
DNA
RN