UNIT 2 TEST – STUDY GUIDE

* Everything from Unit 1 (Ch 2, 3)!
* Chapter 4
	+ Versatility of carbon
	+ Hydrocarbons – polarity, structure
	+ Functional groups – types, role in hydrocarbons, examples in macromolecules.
* Chapter 5
	+ For each category of macromolecule
		- Monomer(s) and their structures
		- Type of bond formed between monomers
		- Function(s) and be able to describe a specific example of a molecule that performs this function in living systems.
	+ Dehydration synthesis and hydrolysis
* Chapter 6
	+ Organelles: nucleus, cell membrane, cytoskeleton, ribosome, mitochondria, chloroplasts, cell wall, rough and smooth ER, Golgi body, lysosome, peroxisome.
	+ For each organelle, describe its structure, function (macromolecule interactions, organelle interactions) and how the structure affects function.
* Chapter 7
	+ Cell membrane structure (membrane proteins, phospholipids, fluid mosaic model, cholesterol, semi-permeability)
	+ Types of transport (active [including proton pumps], passive, facilitated diffusion, cotransport)
	+ Osmosis
		- Water potential
		- Calculate solute potential
		- Discuss water potential as it applies to living systems
	+ Tonicity

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