

Organic Molecule Notes

~~Inorganic~~
Inorganic molecule:

does NOT contain both

Carbon (C) & Hydrogen (H)

Examples: water H_2O , carbon dioxide CO_2 , oxygen O_2

Organic molecule: contain BOTH carbon (C) and hydrogen (H)

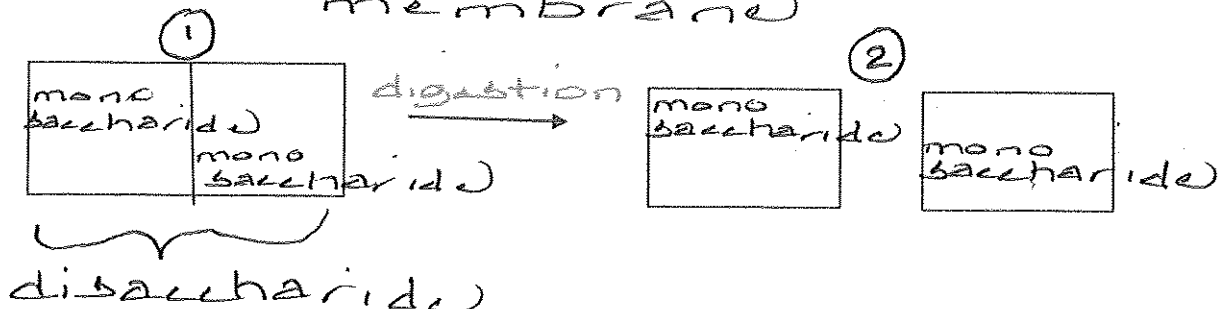
Example: Glucose $(C_6H_{12}O_6)$

4 types of organic molecules:

1. carbohydrates
2. lipids
3. proteins
4. nucleic acids

Organisms need organic and inorganic molecules to survive

Sometimes organisms need to digest these large organic molecules into smaller pieces so they can fit into the plasma membrane cell digestion (membrane)



reactions that break

~~breaking~~ down large

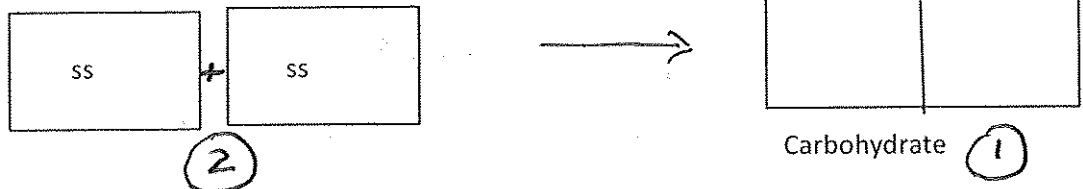
Digestion: molecules into small molecules

Sometimes the smaller pieces need to be combined into larger molecules (synthesis)

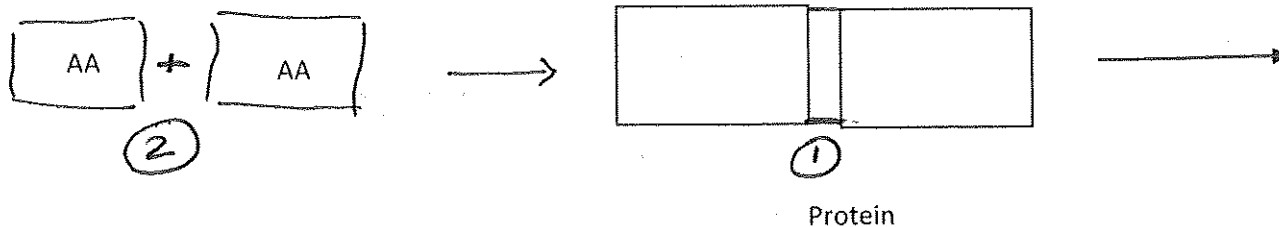
Synthesis: reactions ^{that} combine smaller molecules and make into larger more complex molecules (Leggos)

Synthesis and Digestion are opposites

To synthesize a carbohydrate ^(simple sugars) (monosaccharides) need to be bonded together



* To synthesize a protein, amino acids need to be bonded together



aa = amino acid
ss = simple sugar