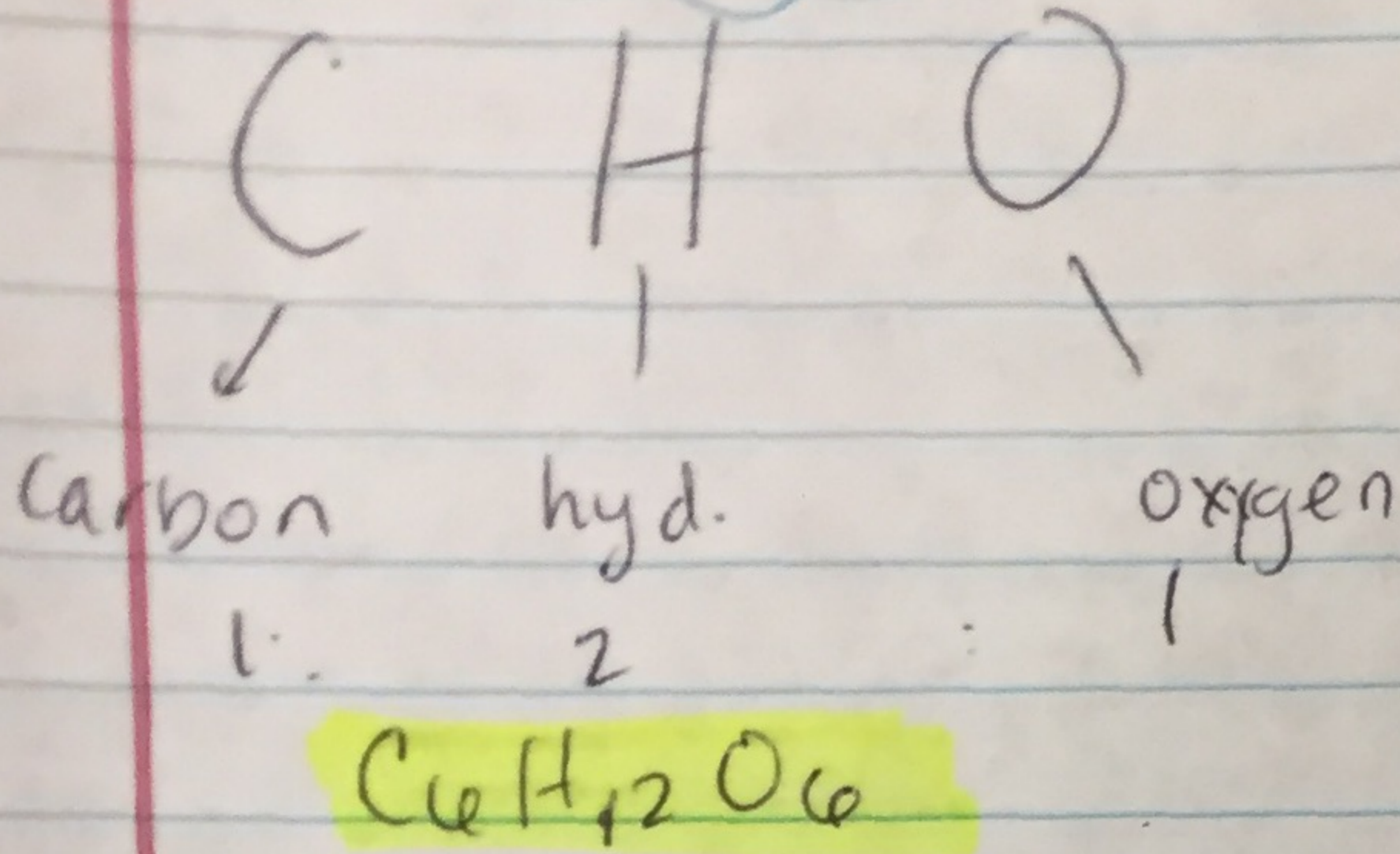


# Carbohydrate

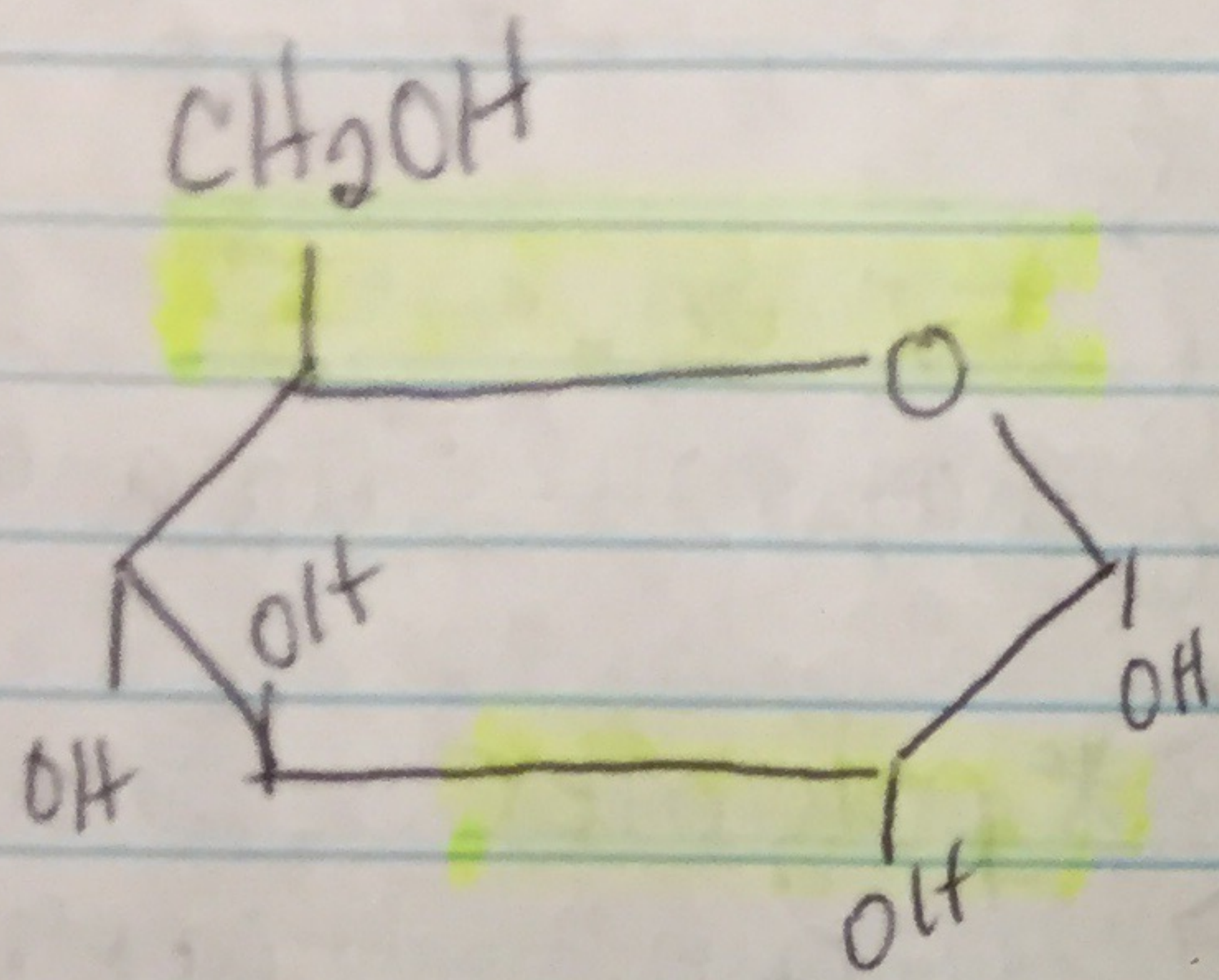


Important Vocab:

- \* **monomer** = subunits that make up a large molecule
- \* **polymer** = 3 or more subunits together

	Group Name	Function	Examples
①	<b>monosaccharide</b> one sugar	* Immediate energy  DNA & RNA	glucose fructose
②	Disaccharide 2 sugars	sugar transport in plants	table sugar (sucrose) milk sugar (lactose)
③	polysaccharide many (3+) sugars	Excess energy is stored "complex carbs" * short term  • cell wall structure • protection	Animals store as <b>GLYCOGEN</b> in muscle  Plants store as <b>STARCH</b>

# Glucose (ring structure)



## Examples

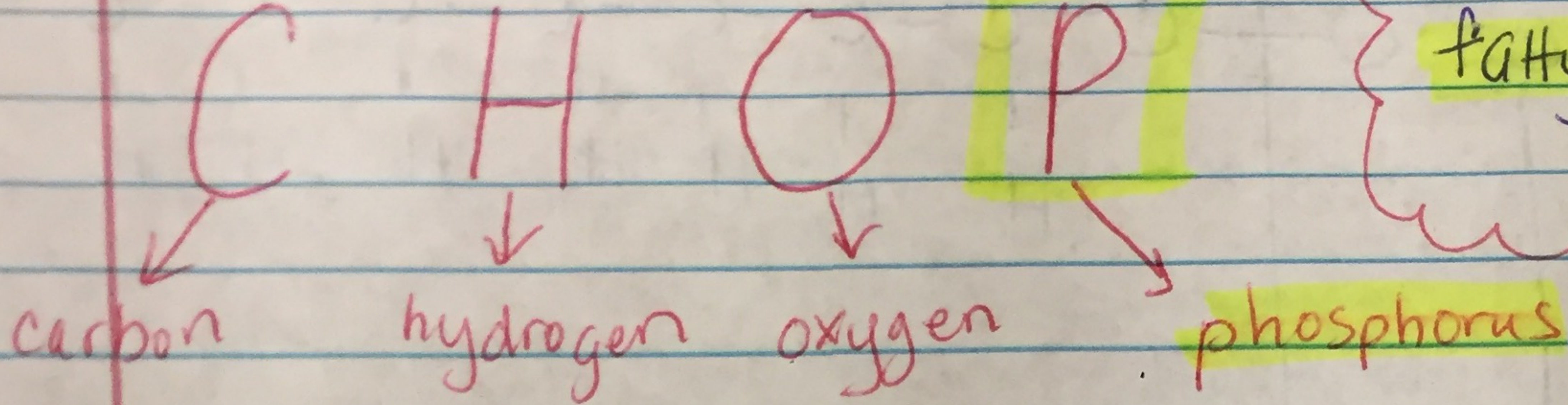
### Polysaccharide (cont.)

\* cellulose - most abundant (celery)  
- structure  
- rigid

\* chitin = exoskeleton of insects

LIPID (aka: fat)

monomer =  
glycerol backbone  
+  
fatty acid tails



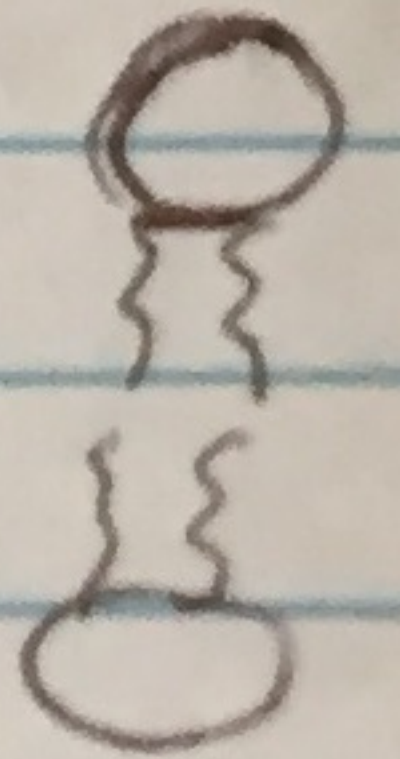
### FUNCTION

### EXAMPLE

#### \* LONG-TERM ENERGY STORAGE

- phospholipid cell membrane

- phospholipid bilayer (supports the cell)



- steroids

- sex hormones (estrogen, testosterone)  
\* cholesterol

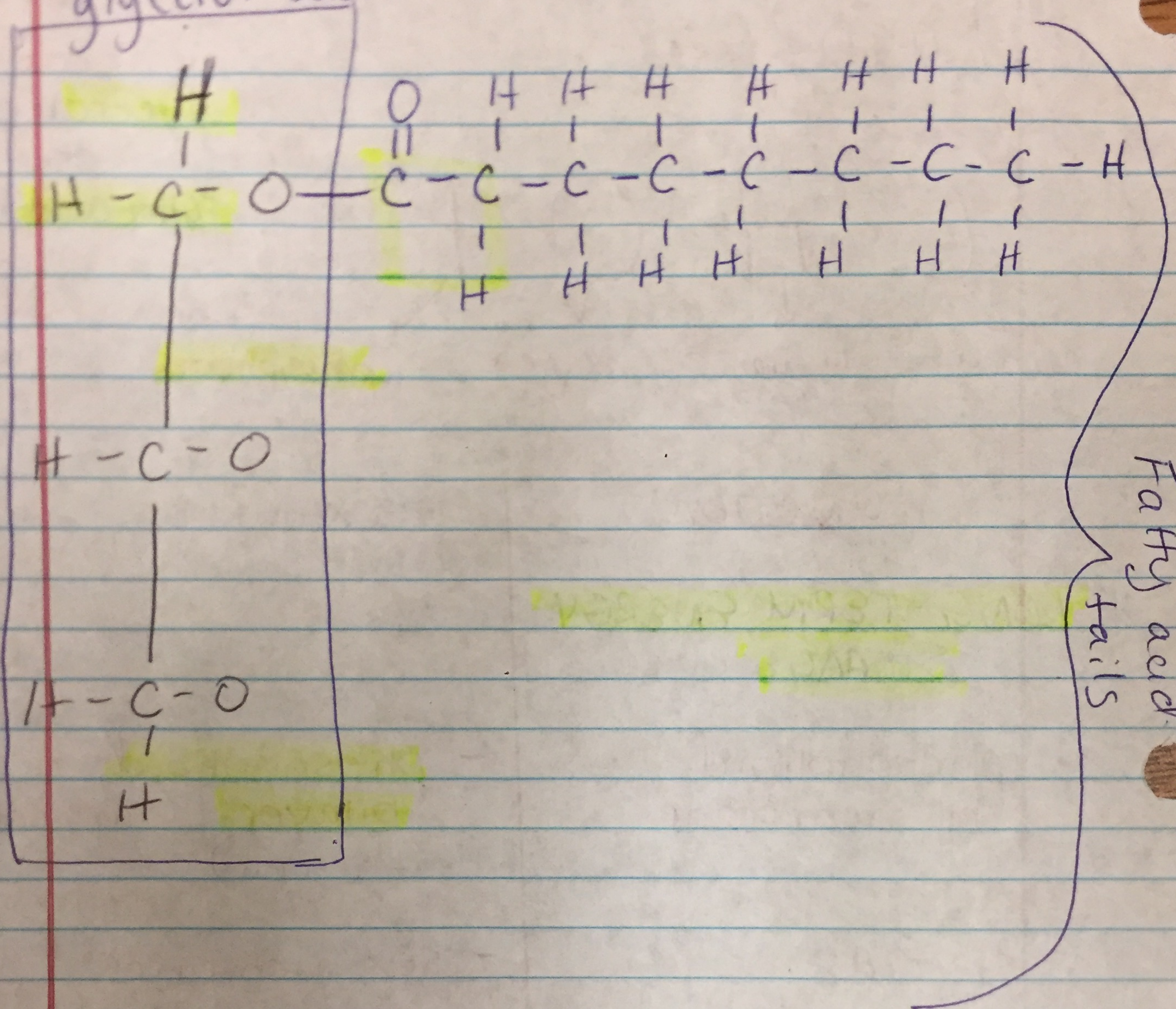
- waxes

- earwax, cuticles
- protective plant coating (leaves)

- fats + oils

saturated = solid  
unsaturated = liquid

glycerol backbone



Fatty acid tails