

BUILDING BLOCKS: CARBOHYDRATES & LIPIDS

TUES, SEPT. 15TH

BIG IDEAS: CARBOHYDRATES — on exam!

• FUNCTION

↳ involved in nearly all aspects; often as a component

• STRUCTURE

↳ sugars → carbohydrates

↳ structure determined by identity and arrangement of sugars

• STRUCTURAL

- Cell walls
- Exoskeletons
- Organic molecules

• ENERGY

- Starches, glycogen, sugars

• MONOMER

- monosaccharide, sugar
- ends in "-ose" (glucose, fructose)

• DIMER

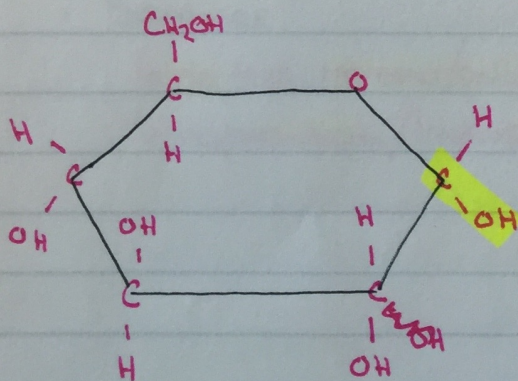
- disaccharide, sugar
- ends in "-ose" (sucrose, lactose)

• BIOLOGICAL SPECIFICITY

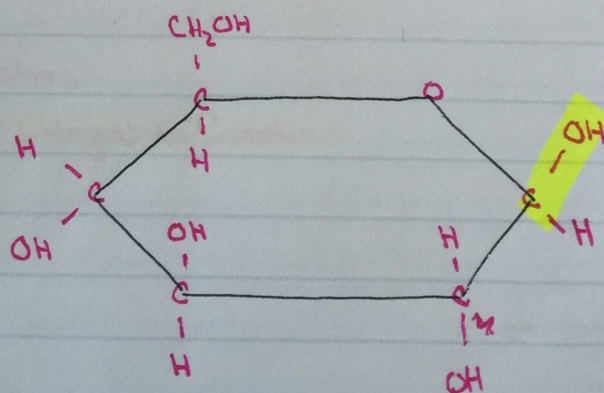
- glycoproteins } cell surface
- glycolipids }

• POLYMER

- Polysaccharide, carbohydrate
- starch, cellulose



α -GLUCOSE



β -GLUCOSE