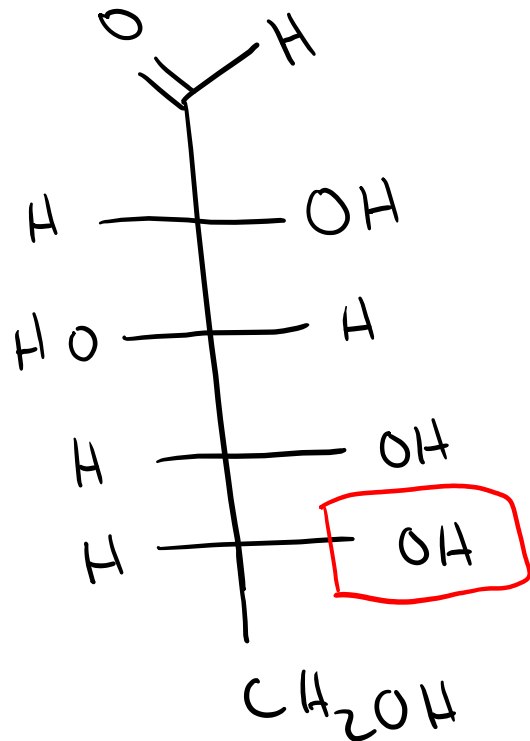


Cyclic Carbohydrates

4/14/2023

Classifying Carbohydrates: "D-" vs "L-"

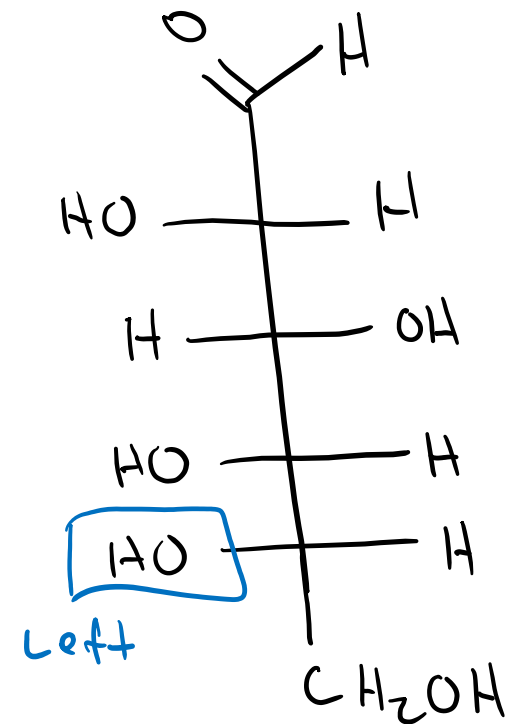
Both structures below are glucose?



D-glucose

enantiomers
every chiral
center
changed!

right

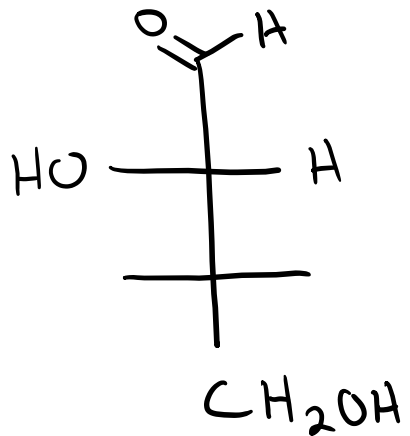


L-glucose

Aldose Sugars

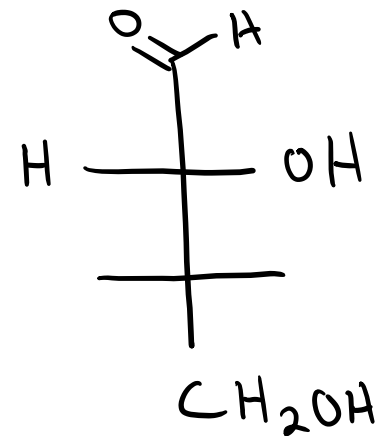
(24.3)

D - Threose



L - Threose

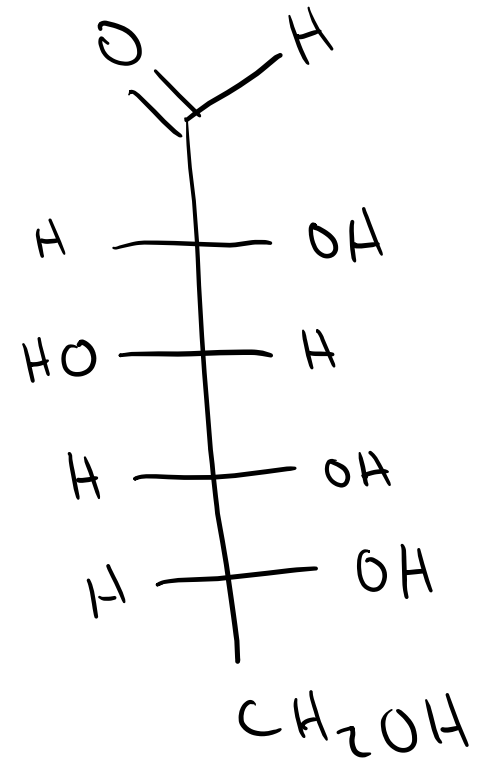
D - Erythrose



L - Erythrose

Epimers

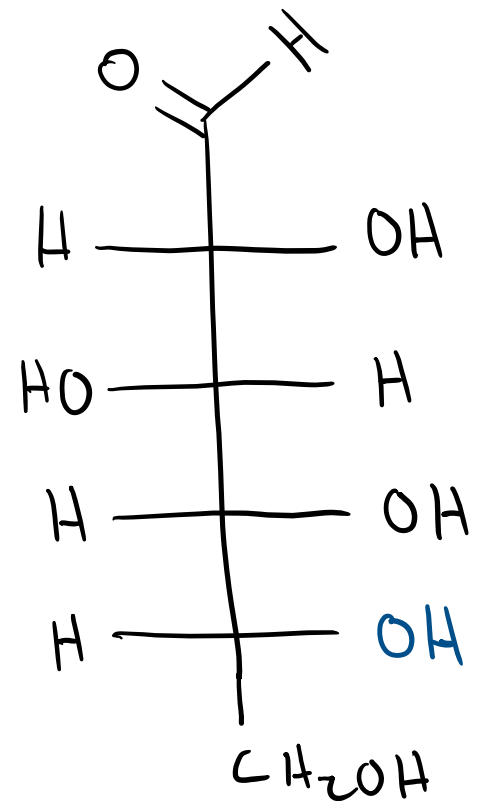
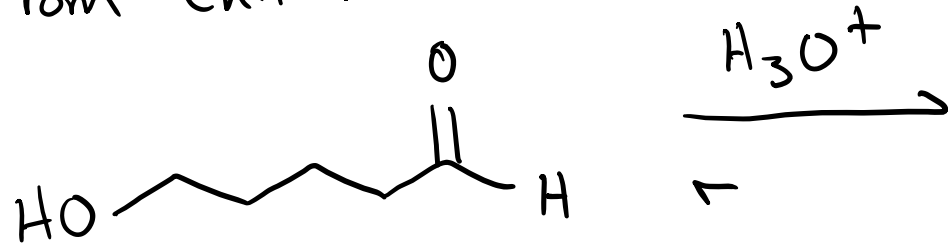
D-glucose



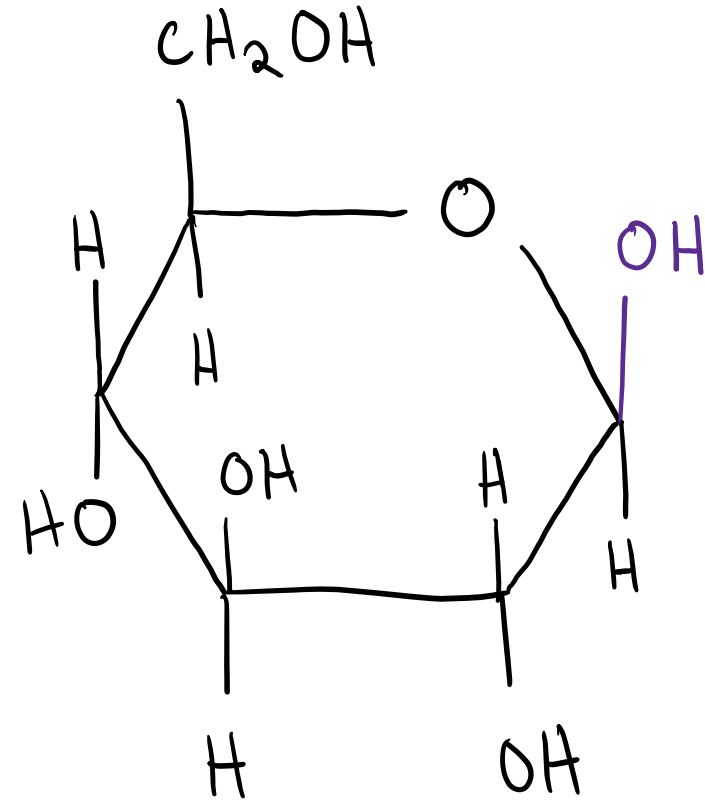
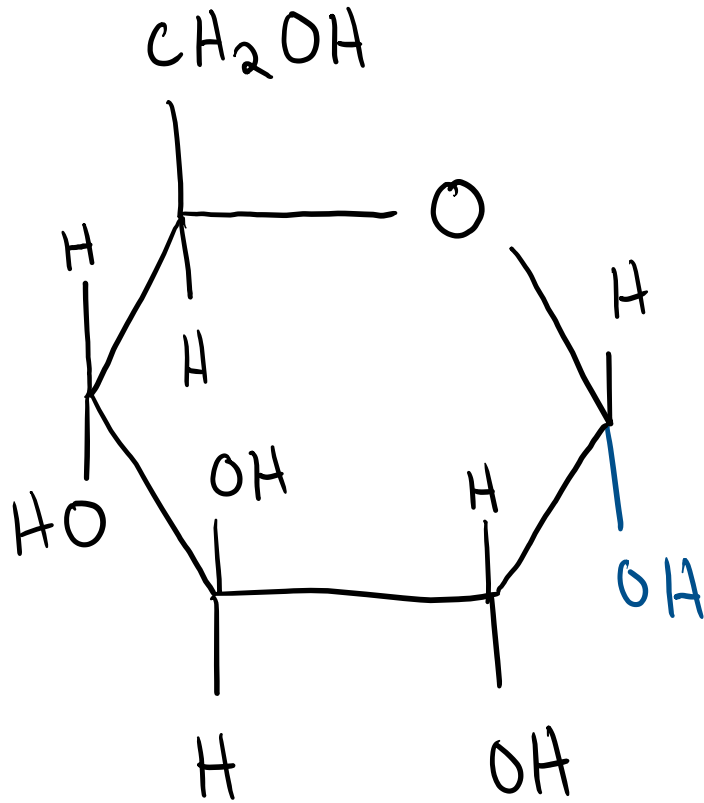
Cyclic Carbohydrates: Pyranose Rings

(24.5)

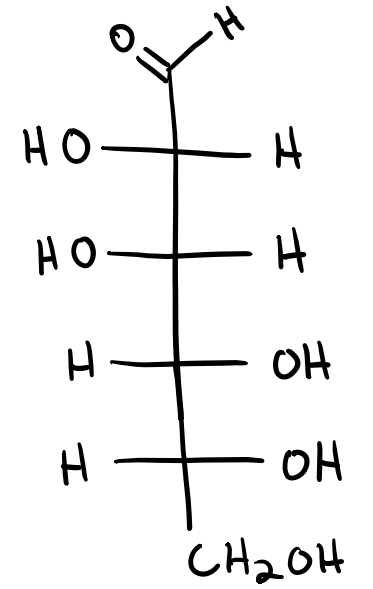
From Ch. 19:



Anomers of Glucopyrananose

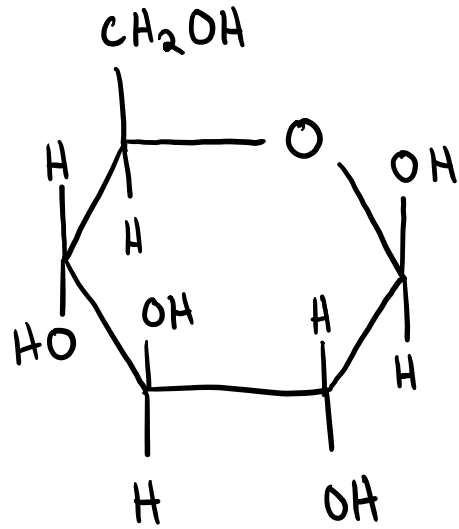


Converting Fischer Projection into Haworth Projection (of the Pyranose)

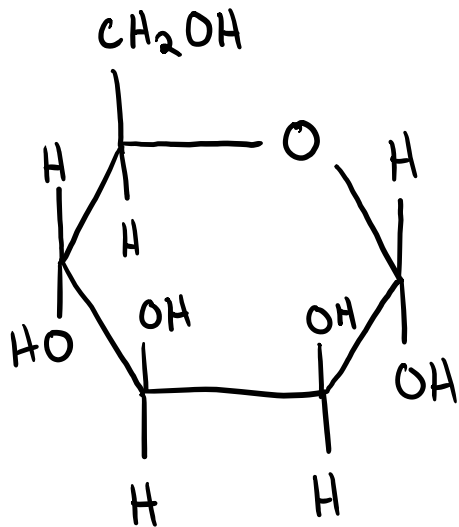


Mannose

Chair Structures of Pyranoses



β -D-Glucopyranose



α -D-Mannopyranose