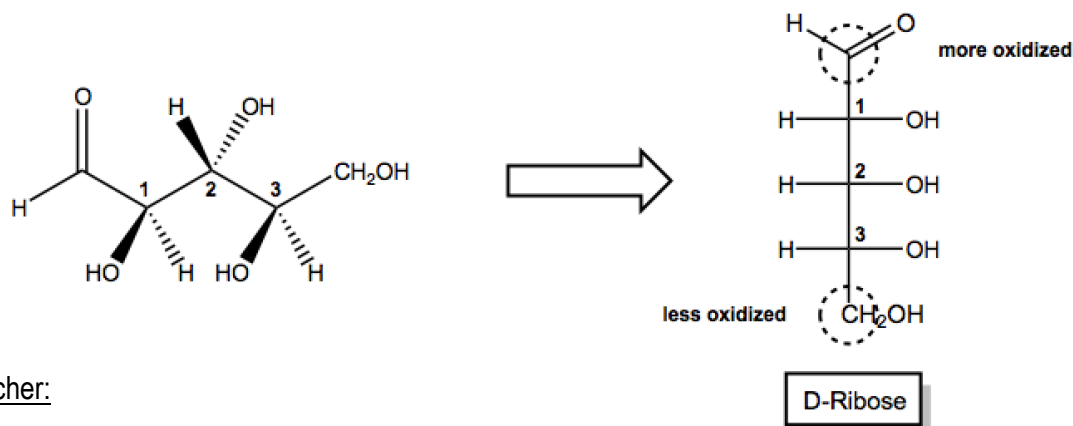


CONCEPT: MONOSACCHARIDES — DRAWING FISCHER PROJECTIONS

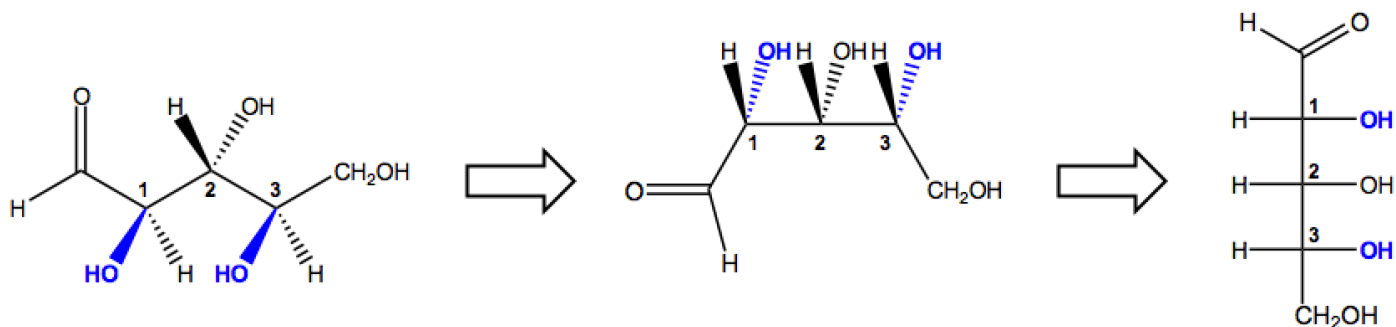
In 1891, *Emil Fischer* devised a representation known as **Fischer Projections** specifically to depict carbohydrates.

- The *most* _____ atom is always represented on _____
- It is necessary to learn how to convert Bondline to Fischer and Fischer to Bondline



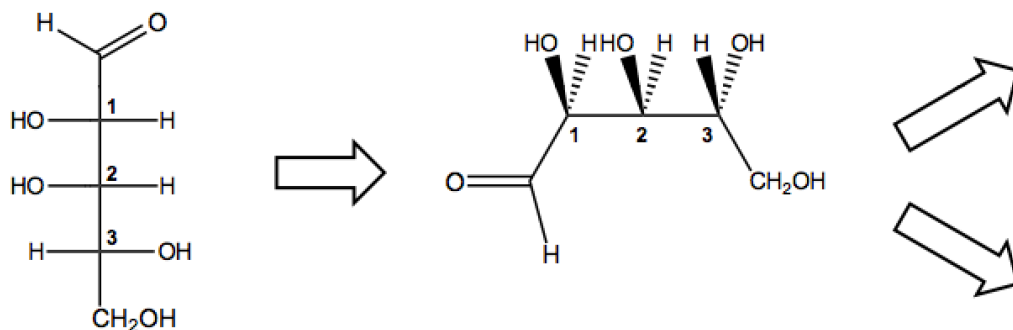
Bondline to Fischer:

- Similar to our lessons in Orgo 1, we can use the *caterpillar method* to convert Bondline to Fischer
- Alternatively we can just swap the stereochemistry of all *downward* facing alcohols

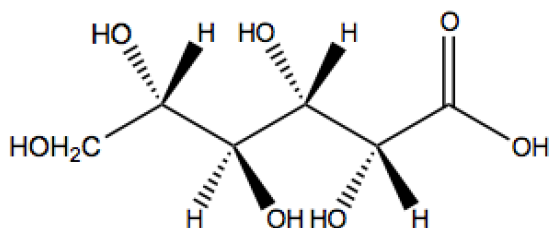


Fischer to Bondline:

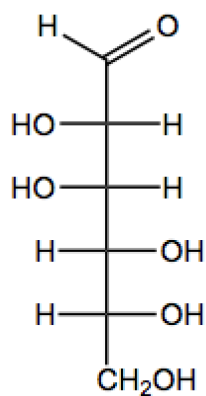
- *Reverse caterpillar* is the most reliable method. Two possible answers



PRACTICE: Convert the following monosaccharide into its Fischer representation. Is it a D or L-isomer?



PRACTICE: Convert the following monosaccharide into a bondline representation.



D-Mannose