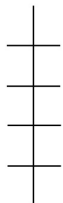


## Problem Set 6:

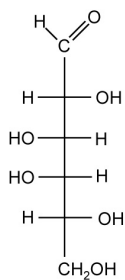
## Practice Drawing Sugar Structures

(NOTE: You do not need to memorize monosaccharide names and structures, or the standard symbol notation, as these will be provided on the exam.)

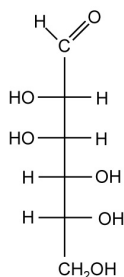
Add the necessary substituents to generate D-Glc in Fischer projection.



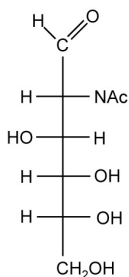
Name the monosaccharides (designate whether D or L).



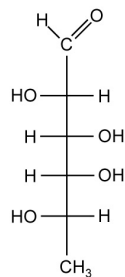
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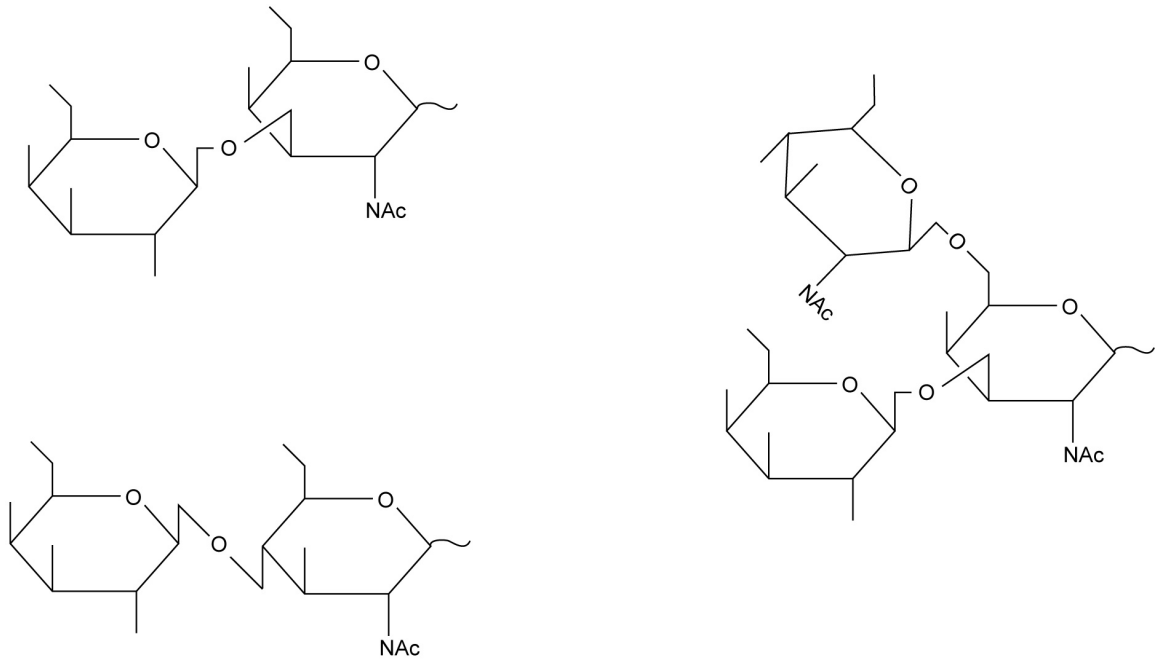


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Convert each of the Fischer Projections to Haworth Projections as  $\beta$ -pyranoses.

Translate the Haworth projections into stereochemical representations as  $\alpha$ -pyranoses in the  ${}^4C_1$  chair configuration.

Name the glycans. Add a sialic acid to one of the glycans in a linkage and at a position known to exist in at least one organism. Name the sialic acid that you have added.



In what glycosaminoglycan(s) would you expect to find the following disaccharides?

