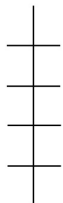


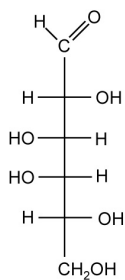
Carbohydrates Problem Set 1: Practice Drawing Sugar Structures

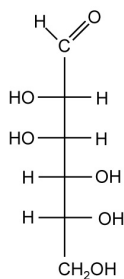
(NOTE: You do not need to memorize monosaccharide names and structures, or the standard symbol notation, as these will be provided on the exam.)

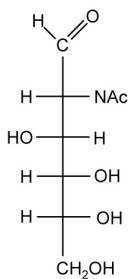
Add the necessary substituents to generate D-Glc in Fischer projection.

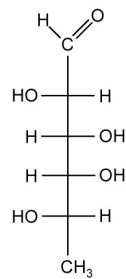


Name the monosaccharides (designate whether D or L).





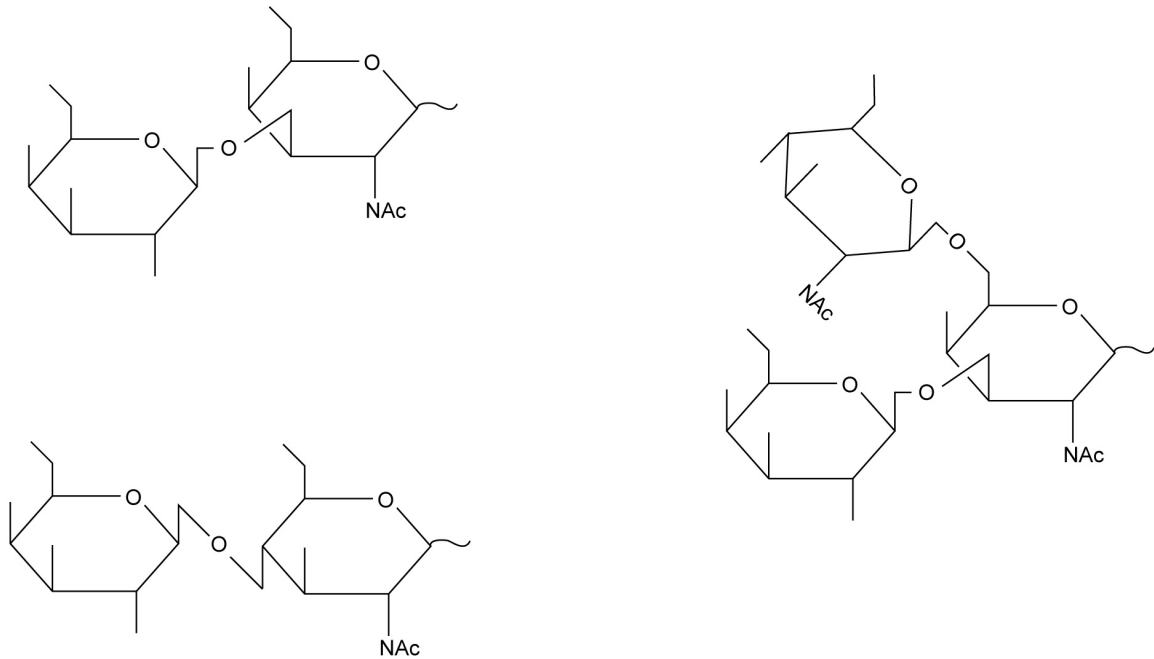




Convert each of the Fischer Projections to Haworth Projections as β -pyranoses.

Translate the Haworth projections into stereochemical representations as α -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?

