

1. Aldoses always have 6 carbons. **False**
2. Aldohexoses always have 6 carbons. **True**
3. Ribose is a **C3** epimer of xylose. **C3**
4. The anomeric carbon in aldoses is always **C1**.
5. If a primary alcohol of glucose is oxidized, what is the name of the resulting molecule? **Glucuronic acid.**
6. The common modified sugar, Glucosamine, contains an amine group at what position? **C2**
7. Which of the following accurately describe the glycosidic bond in sucrose? **glucose C1 --> fructose C2**
8. What is the difference between alpha and beta glycosidic bonds? **The stereochemistry. For D-sugars, the β orientation puts the OH in an equatorial position and is more favorable.**
9. What are biofilms and what are they typically made of? **An extracellular matrix made by bacteria so that they can control the environment that they grow in. Commonly, glucosamine and galacturonic acid are part of the polymeric sugar structures.**
10. What sugars are important in the structure of peptidoglycans. **NAG and NAM**
11. What amino acids are commonly glycosylated in glycoproteins? **Asn (N-linked) and Thr/Ser (O-linked)**