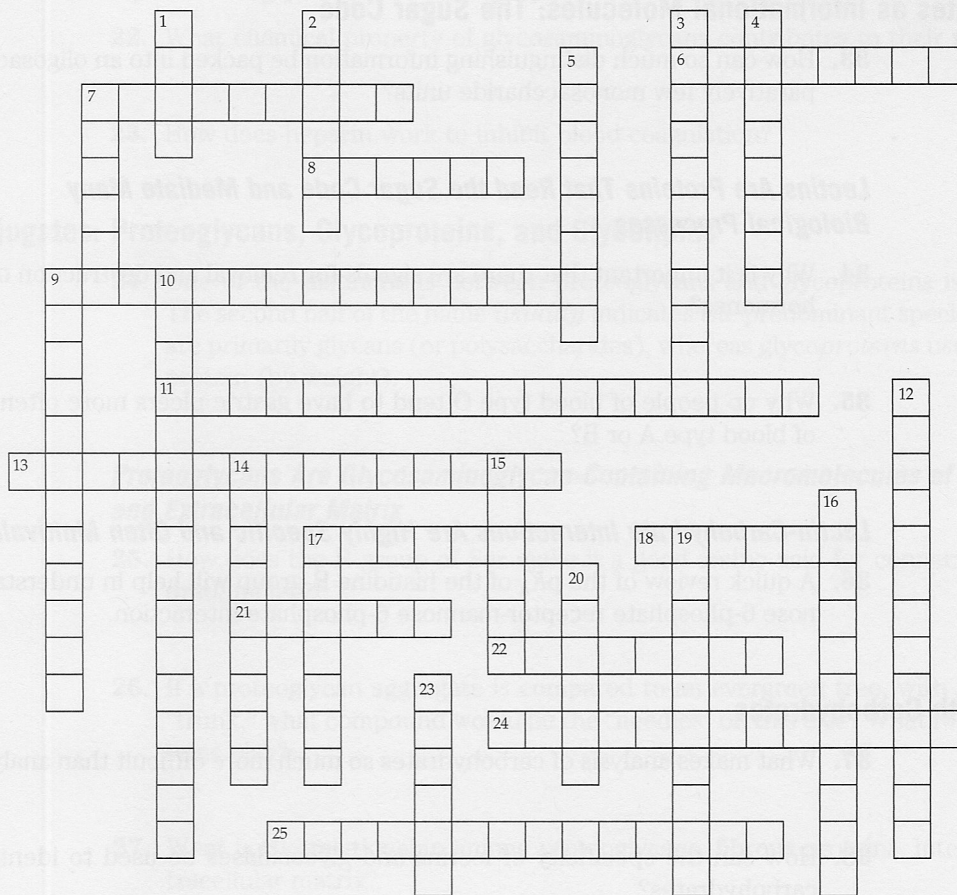


SELF-TEST

Do You Know the Terms?



ACROSS

6. A homopolysaccharide of glucose; it is highly branched and found exclusively in animal cells.
7. Formed by cyclization of a ketose sugar.
8. A homopolysaccharide of glucose units connected by ($\alpha 1 \rightarrow 4$) glycosidic bonds; found exclusively in plants.
9. Simple sugars.
11. Heteropolysaccharides such as hyaluronate.
13. Glycogen and cellulose, with thousands of simple sugar subunits, are examples.
17. Oxidation of the carbonyl carbon of sugars (except glucose) results in the formation of _____ acids.
18. A compound with an asymmetrical atom allowing formation of mirror-image isomers has one or more _____ centers.
21. β -D-glucuronate is an example of a _____ acid.
22. End of a polysaccharide chain that is not involved in a glycosidic bond and has a free anomeric carbon.
24. Lactose and sucrose are examples.
25. Polysaccharides cross-linked by peptides; found in bacterial cell walls.

DOWN

1. A _____ polysaccharide is a polymer of repeating monosaccharides.
2. A sugar with a carbonyl group at C-2 (or any position other than C-1).
3. Carbohydrate moieties are attached to glycoproteins through either *N*- or _____ - _____ bonds.
4. Six-membered ring form of sugars.
5. Five-membered ring form of sugars.
7. A polysaccharide containing more than one type of sugar is a _____ polysaccharide; an example is chondroitin sulfate.
9. Process that interconverts isomers of pyranoses.
10. Lectins are proteins that bind to specific _____.
12. Glycoconjugates containing protein and oligosaccharide portions: for example, glycophorin A.
14. A homopolysaccharide of glucose units connected by ($\beta 1 \rightarrow 4$) glycosidic bonds; it is found exclusively in plants.
15. An isomer that differs at only one of two or more chiral centers.

16. Gangliosides, for example.
17. The α and β forms of a pyranose, for example.
19. In the formation of pyranoses, linkage between the aldehyde on C-1 and the alcohol on C-5.
20. A sugar with the carbonyl group at C-1.
23. Animal tissues have an extracellular _____ composed of glycoconjugates and fibrous proteins.