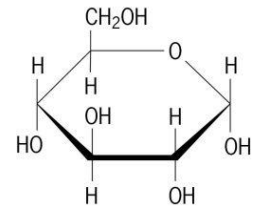


### The Molecules of Cells



1 C

2 D E H Y D R A T I O N

3 M

4 M A L T O S E

5 E

6 G

7 R N A

8 N U C L E I C A C I D

9 A

10 A T P

11 C H

12 H Y D R O L Y S I S

13 A M C O

14 H E M O G L O B I N

15 S T E R O I D S

16 P

17 D N A

18 P R O T E I N

19 C Y T

20 B U N S A T U R A T E D

21 B

22 D

23 U N S A T U R A T E D

24 S A T U R A T E D

25 A L P H A H E L I X

26 N U C L E O T I D E

27 H Y D

28 I

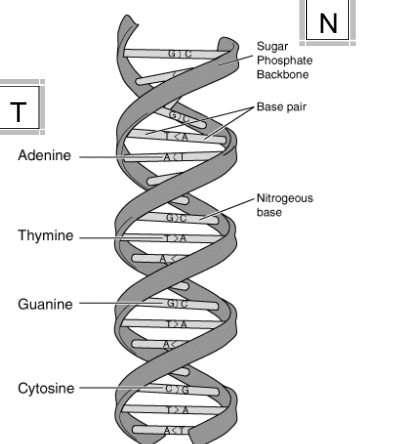
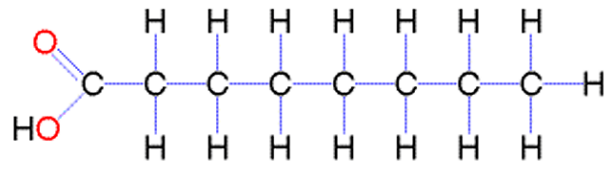
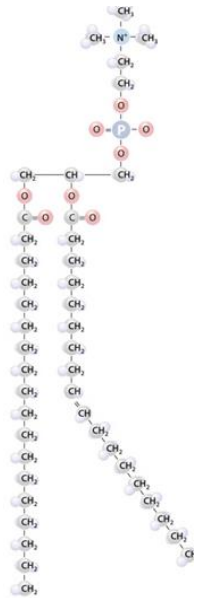
29 M O N O S A C C H A R I D E

30 L I P I D

31 S T A R C H

32 C O V A L E N T

33 H Y D R O P H I L I C



## Across

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2. **DEHYDRATION**—This reaction bonds monomers into polymers.
4. **MALTOSE**—Disaccharide formed when two glucose molecules join together.
7. **RNA**—Nucleic acid with uracil as a nitrogenous base.
8. **NUCLEICACID**—Organic macromolecule that stores, replicates and transmits genetic information.
10. **ATP**—Has high energy phosphate bonds that are easily broken.
12. **HYDROLYSIS**—This reaction breaks polymers into monomers.
14. **HEMOGLOBIN**—This important protein found in red blood cells has a quaternary structure.
15. **STEROIDS**—Forms hormones such as estrogen, testosterone and cholesterol.
17. **DNA**—Nucleic acid with thymine as a nitrogenous base.
18. **PROTEIN**—Organic macromolecule that provides for structural and metabolic body functions.
23. **UNSATURATED**—\_\_\_\_\_ fatty acid has double bonds between carbon atoms.
25. **ALPHAHELIX**—Protein secondary structure (spiral shape - 2 words).
26. **NUCLEOTIDE**—Composed of a nitrogenous base, phosphate and pentose sugar.
29. **MONOSACCHARIDE**—Monomer unit of carbohydrates.
30. **LIPID**—Organic macromolecule that provides lots of energy and long-term storage of energy.
31. **STARCH**—Polysaccharide that is the storage form of glucose in plants.
32. **COVALENT**—Bond formed between two nonmetals.
33. **HYDROPHILIC**—Word meaning "water loving".

## Down

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1. **CELLULOSE**—Polysaccharide that is a linear sequence of glucose molecules.
3. **AMINOACID**—Monomer of proteins.
5. **ENZYMES**—Type of protein that speeds up chemical reactions.
6. **GLYCOGEN**—Polysaccharide that is the storage form of glucose in animals.
9. **CARBOHYDRATE**—Organic macromolecule used for quick energy and short term energy storage.
11. **PHOSPHOLIPID**—Spontaneously forms cell membranes.
13. **ACID**—Solution with a pH less than 7.
16. **PEPTIDE**—Bond formed between two amino acids undergoing dehydration synthesis.
19. **CYTOSINE**—Complementary base pair to guanine.
20. **BUFFER**—Prevents significant changes in pH and maintains homeostasis.
21. **BASE**—Solution with a pH more than 7.
22. **DENATURATION**—Word describing changes in heat and pH that can cause proteins to change shape.
24. **SATURATED**—\_\_\_\_\_ fatty acid has no double bonds between carbon atoms.
26. **NEUTRALFAT**—Organic macromolecule formed by glycerol and one or more fatty acids (2 words).
27. **HYDROPHOBIC**—Word meaning "water hating".
28. **IONIC**—Bond formed between metal and nonmetal.