

GLOSSARY

A

adenosine triphosphate (ATP) a molecule present in all living cells and acting as an energy source for metabolic processes (54)

adhesion the attractive force between unlike substances (51)

alcohol an organic compound with a hydroxyl group attached to one of its carbon atoms (53)

amino acid a carboxylic acid with an amino group; one of 20 monomers that form proteins (56)

C

capillarity the reaction of a liquid surface with a solid; capillarity allows water to creep up the interior of a narrow vessel (51)

carbohydrate an organic compound present in the cells of all living things and a major organic nutrient for humans (55)

cell membrane the lipid bilayer that forms the outer boundary of a cell (59)

cohesion the attraction of like molecules to each other (51)

condensation reaction a chemical reaction, also called dehydration synthesis, in which one molecule of water is produced (53)

D

diabetes mellitus a disorder of glucose metabolism caused by insufficient insulin (60)

dipeptide a formation from two amino acids bonded together by means of a condensation reaction (57)

disaccharide a double sugar formed from two monosaccharides (56)

F

fatty acid a monomer that is part of most lipids (58)

functional group a structural building block that determines the characteristics of a chemical compound (53)

GLOSSARY

H

hydrogen bond a weak chemical bond between the hydrogen atom in one molecule and a negatively-charged region of another molecule (50)

hydrolysis the splitting of a molecule through reaction with water (54)

hydrophilic referring to the molecular attraction to water (58)

hydrophobic referring to the molecular repulsion of water (58)

I

isomer one of two or more compounds that differ in structure but not in molecular composition (55)

L

lipid a kind of organic compound that is insoluble in water, such as fats and steroids (58)

M

macromolecule a very large organic molecule composed of many smaller molecules (53)

monomer a repeated, single-molecule unit in a polymer (53)

monosaccharide a simple sugar such as fructose or glucose (55)

N

nucleic acid an organic molecule, DNA or RNA, that stores and carries important information for cell function (59)

nucleotide a monomer of DNA and RNA, consisting of a nitrogen base, a sugar, and a phosphate group (59)

O

organic compound a compound that is derived from living things and contains carbon (52)

GLOSSARY

P

peptide bond a covalent bond between two amino acids (57)

phospholipid a complex lipid having two fatty acids joined by a molecule of glycerol (58)

polar compound a compound with one side having a negative charge and the other side a positive charge (50)

polymer a compound consisting of repeated linked monomers (53)

polypeptide a long chain of several amino acids (57)

polysaccharide a complex carbohydrate composed of three or more monosaccharides (56)

protein an organic compound composed of one or more chains of polypeptides, which in turn are formed from amino acids (56)

R

ribonucleic acid (RNA) a nucleic acid composed of a single strand and distinguished from DNA by containing ribose and uracil (59)

S

steroid a lipid in which the molecule is composed of four carbon rings (59)

substrate a part, substance, or element that lies beneath and supports another; the reactant in any enzyme-catalyzed reaction (57)

T

triglyceride a lipid made of three fatty-acid molecules and one glycerol molecule (58)

W

wax a structural consisting of a long fatty-acid chain joined to a large alcohol chain (59)