

Biology 12 – Biological Molecules – Review Worksheet

- **Part A: Mix and Match:** Match the term on the right with the definition on the left. Each term can be used only once. Write the letter of the best answer in the box to the left of the definition.

	1)	water-"loving"	A)	adenosine triphosphate
	2)	water-"fearing"	B)	amino acid
	3)	two or more polypeptide chains coming together and bonding with each other	C)	atom
	4)	to permanently change the 3 dimensional structure of a protein	D)	buffer
	5)	the subunit that makes up nucleic acids - 4 types in DNA are A C G T	E)	carbohydrate
	6)	the smallest unit of matter that cannot normally be broken into smaller particles	F)	cellulose
	7)	the process of breaking down large fat droplets into smaller fat droplets	G)	cholesterol
	8)	the loose association of amino acids in a polypeptide chain with each other, usually through H-bonds. e.g. alpha helix, beta pleated sheet	H)	dehydration synthesis
	9)	the linear sequence of amino acids in a protein, which ultimately determines its shape	I)	denature
	10)	the building block of protein -- there are 20 different kinds normally found in nature	J)	emulsification
	11)	the bond that forms between two amino acids joined by dehydration synthesis	K)	enzymes
	12)	the 3-D shape of a polypeptide chain due to it folding back on itself and forming bonds.	L)	glucose
	13)	creating a bond between two atoms by taking OH from one atom and H from the other	M)	glycogen
	14)	breaking a bond between two atoms by adding OH to one atom and H to the other	N)	hydrogen bond
	15)	biological catalysts, composed of protein, that speed up chemical reactions	O)	hydrolysis
	16)	ATP - the molecule that carries energy in the cell	P)	hydrophobic
	17)	any molecule with the molecular formula $C_n(H_2O)_n$	Q)	hydrophilic
	18)	an important component of cell membranes, has a hydrophilic head, hydrophobic tail	R)	ion
	19)	an enzyme that breaks down maltose to two glucose molecules	S)	lipid
	20)	an atom or molecule that has either lost or gained electrons	T)	maltose
	21)	a weak bond due to the attraction between partial charges on hydrogen, oxygen, and nitrogen atoms	U)	neutral fat
	22)	a polymer of glucose, used as a structural component of plant cell walls	V)	nucleotide
	23)	a polymer of glucose, used as a storage form for glucose in animals	W)	oxidation
	24)	a polymer of glucose, used as a storage form for glucose in plants	X)	peptide bond
	25)	a loss of Hydrogen atoms (or electrons)	Y)	phospholipid
	26)	a lipid that is an important component of cell membranes and from which steroid hormones are made	Z)	
	27)	a lipid composed of glycerol joined to 3 fatty acids	AA)	polymer
	28)	a large organic molecule formed from a chain or chains of amino acids	BB)	primary structure