

Name: \_\_\_\_\_ KEY \_\_\_\_\_  
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**Biochemistry Review Worksheet**

**Part A:** Write the correct letter of the word that best matches the following definition.

<i>U</i>	water-"loving"	a. atom
<i>P</i>	water-"fearing"	b. amino acid
<i>EE</i>	two or more polypeptide chains coming together and bonding with each other	c. adenosine triphosphate
<i>I</i>	to permanently change the 3 dimensional structure of a protein	d. buffer
<i>Y</i>	the subunit that makes up nucleic acids - 4 types in DNA are ACGT	e. carbohydrate
<i>A</i>	the smallest unit of matter that cannot normally be broken into smaller particles	f. cellulose
<i>J</i>	the process of breaking down large fat droplets into smaller fat droplets	g. cholesterol
<i>BB</i>	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
<i>DD</i>	the linear sequence of amino acids in a protein, which ultimately determines its shape	i. denature
<i>B</i>	the building block of protein -- there are 20 different kinds normally found in nature	j. emulsification
<i>AA</i>	the bond that forms between two amino acids joined by dehydration synthesis	k. enzymes
<i>Q</i>	the 3-D shape of a polypeptide chain due to it folding back on itself and forming bonds.	l. glucose
<i>II</i>	three carbon that joins with fatty acids to produce triglycerides	m. glycogen
<i>D</i>	a chemical that resists changes in pH	n. hydrogen bond
<i>H</i>	creating a bond between two atoms by taking OH from one atom and H from the other	o. hydrolysis
<i>O</i>	breaking a bond between two atoms by adding OH to one atom and H to the other	p. hydrophobic
<i>K</i>	biological catalysts, composed of protein, that speed up chemical reactions	q. tertiary structure
<i>C</i>	ATP - the molecule that carries energy in the cell	r. lipid
<i>E</i>	any molecule with the molecular formula $C_n(H_2O)_n$	s. starch
<i>GG</i>	an important component of cell membranes, has a hydrophilic head, hydrophobic tail	t. unsaturated fatty acid
<i>V</i>	an enzyme that breaks down maltose to two glucose molecules	u. hydrophilic
<i>Z</i>	molecules that store genetic information (e.g. DNA and RNA)	v. maltase
<i>N</i>	a weak bond due to the attraction between partial charges on hydrogen, oxygen, and nitrogen atoms	w. saturated fatty acid
<i>F</i>	a polymer of glucose, used as a structural component of plant cell walls	x. neutral fat
<i>M</i>	a polymer of glucose, used as a storage form for glucose in animals	y. nucleotide
<i>S</i>	a polymer of glucose, used as a storage form for glucose in plants	z. nucleic acids
<i>L</i>	a 6 carbon sugar that forms a 6-membered ring -- used as energy source by cells	aa. peptide bond
<i>G</i>	a lipid that is an important component of cell membranes and from which steroid hormones are made	bb. secondary structure
<i>X</i>	a lipid composed of glycerol joined to 3 fatty acids	cc. polymer
<i>FF</i>	a large organic molecule formed from a chain or chains of amino acids	dd. primary structure
<i>CC</i>	a large molecule made by joining together smaller identical (or similar) molecules	ee. quaternary structure
<i>R</i>	a class of molecules that includes neutral fats and steroids	ff. protein