

Unit 3 Lesson 1-2 Vocabulary (9.2-9.3)

Name _____ period _____ date _____

Cellular Respiration	Occurs in mitochondria; releases energy from food. $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \longrightarrow 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{ATP (Energy)}$
Glycolysis	1 st stage of cell respiration, occurs in cytoplasm, 1 glucose becomes 2 molecules of pyruvic acid, 2 ATP and 2 NADH
NADH	Forms when NAD ⁺ carries 2e ⁻ from glycolysis to e ⁻ transport chain
Kreb's Cycle	2 nd stage, occurs in mitochondria, pyruvic acid becomes 2 ATP, 5 e ⁻ carriers and CO ₂ .
Electron Transport	3 rd and final stage, occurs in mitochondria, uses 7 e ⁻ carriers and O ₂ to produce 32 ATP's and H ₂ O
Aerobic Pathways	2 nd and 3 rd stage, requires oxygen
Anaerobic Pathway	1 st stage, does not require oxygen
Fermentation	Allows for the production of ATP when O ₂ is not present
Alcoholic Fermentation	Uses pyruvic acid and NADH to make alcohol, CO ₂ and NAD ⁺
Lactic acid Fermentation	Uses pyruvic acid and NADH to make Lactic acid and NAD ⁺
Yeast	Unicellular alcohol fermenter: breads and alcohol
Acidophyllis bacteria	Use lactic acid fermentation to make yogurt, cheese and sour cream
Skeletal muscle cells	The human cells best at carrying out lactic acid fermentation
Three sources of ATP for Human Muscles	ATP stored in muscle, ATP from lactic acid fermentation, ATP from cell respiration