CELLULAR RESPIRATION

Define cellular respiration (the definition from 3.7.1!).

Cell respiration is the controlled release of energy from organic compounds in cells to form ATP.

MULTIPLE CHOICE. Circle ALL that are TRUE. There may be MORE THAN one correct answer.

is the first step in cellular respiration that begins releasing energy stored in glucose.

- A. Alcoholic fermentation C. Glycolysis
- B. Lactic acid fermentation

D. Electron transport chain

The carrier(s) for hydrogen ions and high energy electrons during GLYCOLYSIS are _____

- A ATP C. FADH₂
 B NADH D. NADPH
- B. NADH If oxygen is NOT present, glycolysis is followed by __
 - A. Krebs cycle
 - B. electron transport chain

- C. fermentation

 D. link reaction
- Name the 3 carbon molecule produced when glucose is broken in half during glycolysis.
 - A. pyruvic ocid

C. Acetyl-CoA

B. loctic acid

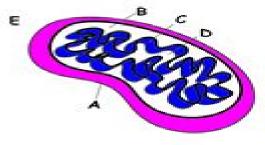
A. genobic

- D. citric acid
- Since fermentation does not require oxygen it is said to be _
 - 8. angerobic

How many ATP molecules are added to get glycolysis started? ____2

Since alycolysis produces 4 ATP molecules, this results in a NET GAIN of 2 ATP's

MATCH THE LETTER IN THE DIAGRAM WITH THE LABEL: (You can use them MORE THAN ONCE)



D___ MATRIX

B___ INTERMEMBRANE SPACE

E CYTOPLASM

___A___ OUTER MEMBRANE

C INNER MEMBRANE (CRISTAE)

E____ Place GLYCOLYSIS happens

____D____Place LINK REACTION happens

_____ Place ETC is located

____D___ Place KREBS CYCLE happens

C Place of OXIDATIVE PHOSPHORYLATION

Write the complete overall chemical equation for cellular respiration using chemical symbols instead of words:

C6H12O6 + 6O2 -----> 6CO2 + 6H2O + 36 ATP

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