

CELLULAR RESPIRATION STUDY GUIDE

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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
- B. Lactic acid fermentation
- C. Glycolysis
- D. Electron transport chain

The carriers for energy and high energy electrons during GLYCOLYSIS are _____.

- A. ATP
- B. NADH
- C. FADH₂
- D. NADPH

If oxygen is NOT present, glycolysis is followed by _____.

- A. Krebs cycle
- B. electron transport chain
- C. fermentation

Name the 3 carbon molecule produced when glucose is broken in half during glycolysis.

- A. pyruvic acid
- B. lactic acid
- C. Acetyl-CoA
- D. citric acid

Since fermentation does not require oxygen it is said to be _____.

- A. aerobic
- B. anaerobic

Which high energy electron carrier is regenerated during fermentation that allows cells to continue to make ATP using glycolysis?

- A. NAD⁺
- B. NADPH
- C. ATP
- D. ADP

How many ATP molecules are added to get glycolysis started? **2**

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