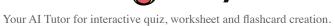


Remember Steps Of Glycolysis Quiz PDF

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What is the primary location of glycolysis within a cell?
mitochondriaCytoplasmNucleus
○ Endoplasmic reticulum
Which of the following are enzymes involved in the glycolysis pathway?
Hexokinase
Pyruvate carboxylase
Phosphofructokinase-1 (PFK-1)
Aldolase
Explain the significance of the energy investment phase in glycolysis and how it contributes to the overall process.
Which enzyme is responsible for converting glucose to glucose-6-phosphate in glycolysis?
○ Hexokinase
Glukokinase
O Phosphoglucoisomerase
O Pyruvate kinase







What is the net gain of ATP molecules per glucose molecule during glycolysis?
○ 1 ATP
○ 2 ATP
○ 3 ATP
○ 4 ATP
Which of the following are outcomes of glycolysis?
☐ Production of pyruvate
☐ Generation of ATP
☐ Formation of acetyl-CoA
Release of oxygen
Evaluate the importance of glycolysis in both aerobic and anaerobic conditions.
Which enzyme catalyzes the conversion of phosphoenolpyruvate to pyruvate?
○ Hexokinase
O Pyruvate kinase
○ Aldolase
○ Enolase
Which enzymes are involved in the regulation of glycolysis?
Hexokinase
☐ Phosphofructokinase-1 (PFK-1)
☐ Pyruvate kinase
Citrate synthase
Describe the differences between the energy investment phase and the energy never these of
Describe the differences between the energy investment phase and the energy payoff phase of glycolysis.



What is the final product of glycolysis?	
○ Acetyl-CoA	
○ Lactate	
O Pyruvate	
○ Ethanol	
Which factors can influence the regulation of glycolysis?	
☐ ATP levels	
AMP levels	
Oxygen availability	
Feedback inhibition	
Explain how glycolysis can proceed in the absence of oxygen and its implications for energy production.	
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Which of the following is not an intermediate of glycolysis?	
○ Glucose-6-phosphate	
○ Fructose-1,6-bisphosphate	
○ Citrate	
O Pyruvate	

Which of the following are true about the energy payoff phase of glycolysis?



☐ It consumes ATP.
☐ It produces NADH.
☐ It generates ATP.
☐ It forms glucose-6-phosphate.
Discuss the role of glycolysis in the context of cellular metabolism and its integration with other metabolic pathways.
What is the primary purpose of glycolysis in cellular metabolism?
◯ To produce carbon dioxide
○ To generate glucose
○ To produce ATP and pyruvate
○ To synthesize proteins
Which molecules are produced during glycolysis that can be used in other metabolic pathways?
□ NADH
☐ Acetyl-CoA
☐ Pyruvate
Analyze the impact of glycolysis on the overall energy balance of a cell and its role in energy homeostasis.



Which enzyme is responsible for the cleavage of fructose-1,6-bisphosphate into two 3-carbon molecules?
○ Hexokinase
○ Aldolase
O Phosphoglycerate kinase
O Pyruvate dehydrogenase
Which steps in glycolysis are considered irreversible and play a role in its regulation?
☐ Glucose to glucose-6-phosphate
☐ Fructose-6-phosphate to fructose-1,6-bisphosphate
1,3-bisphosphoglycerate to 3-phosphoglycerate
☐ Phosphoenolpyruvate to pyruvate
Evaluate the significance of glycolysis in different types of cells and its adaptation to various energy demands.