

GLUCOSE

Reactions ①-③  
Activation by phosphorylation  
2 ATPs invested

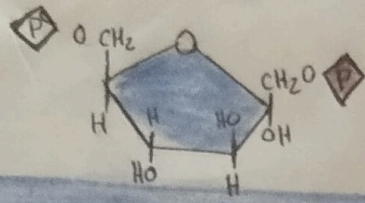


②

③



Reactions ④ and ⑤  
cleavage of six-carbon sugar  
phosphate to 2 three-sugar  
phosphates



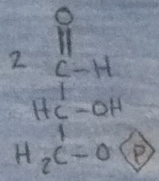
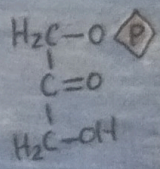
Fructose  
1,6-bisphosphate

④

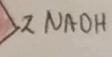
Glycerate  
3-phosphate

⑤

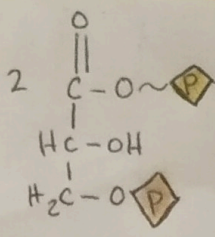
Dihydroxyacetone  
Phosphate



⑥



1,3-Bisphospho-  
glycerate

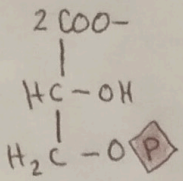


⑦



Reaction 7  
substrate-level-phosphory-  
lation  
2 ATPs generated

3-phospho-gly-  
cerate



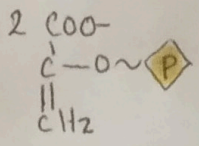
⑧

⑨



Reactions 8 and 9  
generation of a super-high  
energy compound (and water)

Phosphoenol-  
Pyruvate



⑩



Reaction 10  
substrate-level phosphory-  
lation  
2 ATPs generated

Pyruvate

