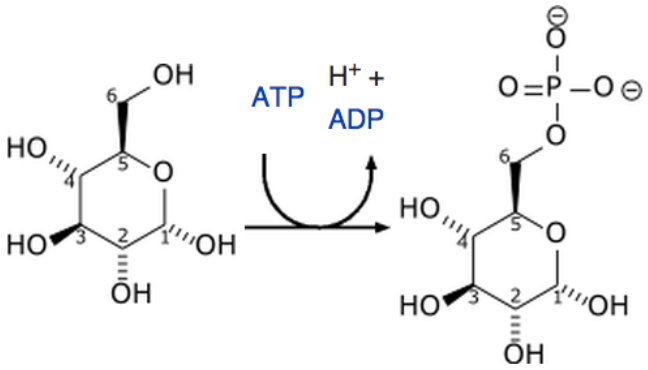
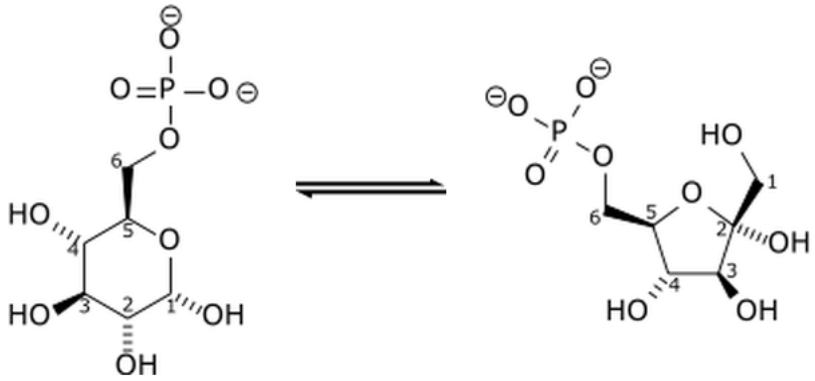
CONCEPT: GLYCOLYSIS

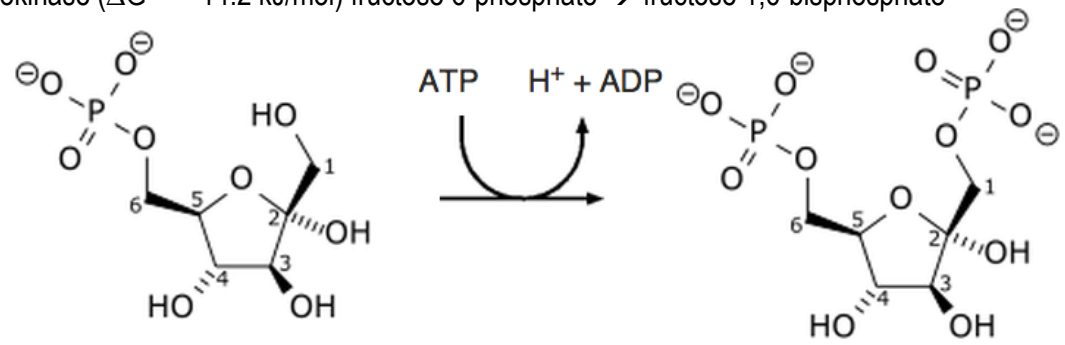
1. Hexokinase ($\Delta G'^{o}$ = -16.7 kJ/mol) glucose → glucose 6-phosphate



2. Phosphohexose isomerase ($\Delta G'^{o}$ = 1.7 kJ/mol) glucose 6-phosphate → fructose 6-phosphate



3. Phosphofructokinase ($\Delta G'^{o}$ = -14.2 kJ/mol) fructose 6-phosphate → fructose 1,6-bisphosphate



4. Aldolase ($\Delta G'^{o}$ = 23.8 kJ/mol) f 1,6-bp → glyceralehyde 3-phosphate (G3P) + dihydroxyacetone phosphate (DHAP)
   - □ ΔG at cellular conditions is between -6 and 0 kJ/mol