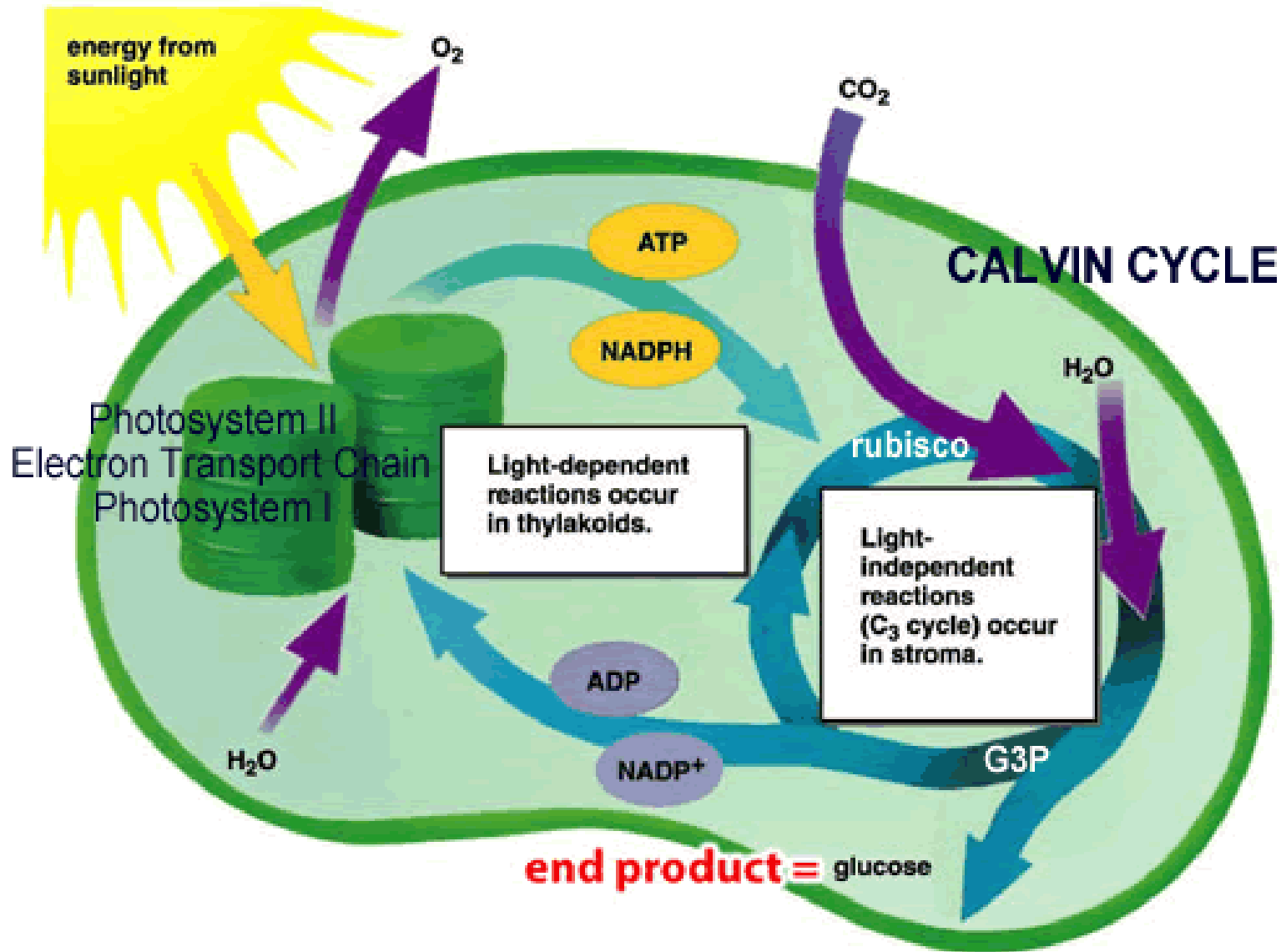
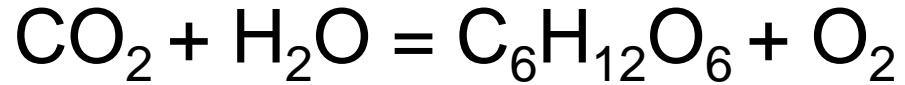


Theoretical maximum glucose production



Each year plants fix 1.4 billion tons of CO₂.



Given that the concentration of CO₂ is 380 ppm and the pressure of CO₂ is 3.8×10^{-4} atm at 298 K.

Given that the mass of the atmosphere is 5×10^{18} kg, calculate the mass of carbon that would be fixed as glucose if all of the CO₂ were taken up by plants.