

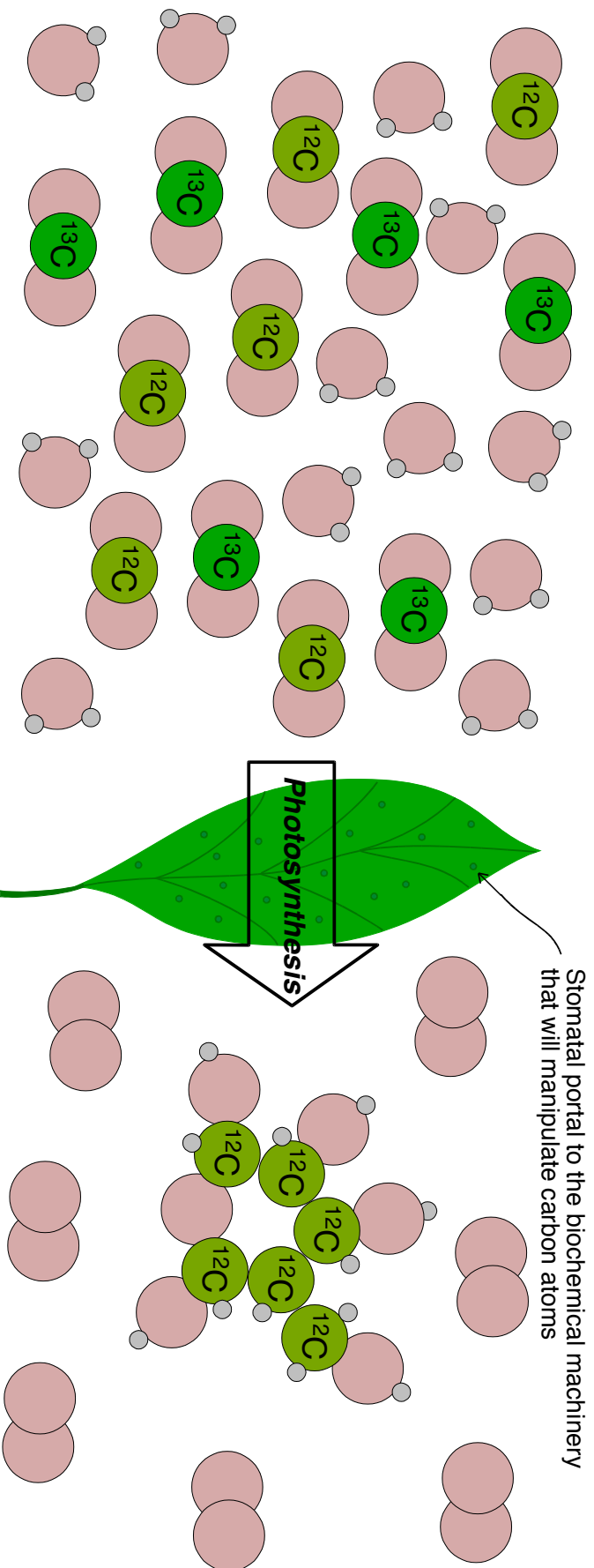
Fractionation of carbon isotopes in photosynthesis

In photosynthesis,

Carbon dioxide + Water → Organic matter + Oxygen



the lighter isotope of carbon, ^{12}C , is greatly preferred.



This makes carbon isotopes great tracers for biological carbon, which will be enriched in ^{12}C (i.e., depleted in ^{13}C , and thus have a low $\delta^{13}\text{C}$).