The nutrient cycle is the movement of the essential chemical elements of life from the nonliving environment to living organisms and back to the nonliving environment. Typical nutrient elements are nitrogen (N), phosphorus (P), sulfur (S), calcium (Ca), potassium (K), oxygen (O), and carbon (C). These elements vary in form (inorganic or organic) and quantity throughout the cycle. Both physical processes such as weathering and biological processes such as protein synthesis and decomposition are important components of the cycle.