

TABLE 1.2. Elemental Composition of *Chlorella* and *Euglena* (Freshwater, Nonvacuolate Algae) and the Concentration of Available Sources of the Elements in Freshwater (From Raven, 1980a)^a

Element	mmol m ⁻³ in freshwater	<i>Chlorella</i> (mol per 1,000 mol C)	<i>Euglena</i> (mol per 1,000 mol C)
C	10–2,500 (CO ₂ + HCO ₃ [−] + CO ₃ ^{2−})	1,000	1,000
N	0.5–50 (NH ₄ ⁺ + NO ₃ [−])	100–130	90–160
S	100–1,200 (SO ₄ ^{2−})	3–6	3–15
P	0.5–1.8 (H ₂ PO ₄ [−] + HPO ₄ ^{2−})	3–19	5–18
K	7–200 (K ⁺)	2.5–15	2–15
Na	5–500 (Na ⁺)	0.2–5	0.2–0.25
Ca	11–3,000 (Ca ²⁺)	2	0.02–0.3
Mg	8–600 (Mg ²⁺)	2–14	0.8–1.5
Cl	4–300 (Cl [−])	0.2	0.1–0.2

^aNote that nitrate is available as a nitrogen source to *Chlorella* but not to *Euglena*.