

TABLE 1. Cell carbon, volume and surface area, and ratios of C/A and C/V for various phytoplankton organisms

Organism	Carbon content/cell (picograms)	Cell surface area ( $\mu^2$ )	Cell volume ( $\mu^3$ )	C/A (picogram/ $\mu^2$ )	C/V (picogram/ $\mu^3$ )	
<i>Coccolithus huxleyi</i>	4.1	37	20.6	0.11	0.201	
	3.7	29	14.2	0.13	0.258	
<i>Cyclotella nana</i>	40	220	220	0.20	0.184	
	15	136	120	0.19	0.123	
	19	169	168	0.11	0.113	
<i>Dunaliella tertiolecta</i>	43	202	300	0.20	0.143	
	52	238	316	0.22	0.164	
<i>Skeletonema costatum</i>	33	139	312	0.24	0.105	
<i>Syracosphaera elongata</i>	229	610	1,380	0.38	0.166	
	267	675	1,610	0.40	0.166	
<i>Thalassiosira fluviatilis</i>	196	570	1,250	0.34	0.157	
	150	1,000	1,610	0.15	0.093	
	139	800	1,390	0.17	0.100	
	187	727	1,500	0.26	0.124	
	89	803	1,720	0.11	0.052	
	122	803	1,720	0.15	0.071	
	118	928	2,150	0.13	0.055	
	128	842	1,840	0.15	0.070	
	253	1,106	2,750	0.23	0.092	
	292	1,513	4,360	0.19	0.067	
	193	1,298	3,500	0.15	0.055	
	<i>Thalassiosira rotula</i>	288	1,273	3,480	0.23	0.083
	<i>Peridinium trochoideum</i>	1,270	1,950	8,250	0.65	0.154
<i>Gonyaulax polyedra</i>	990	3,180	16,800	0.32	0.059	
<i>Striatella unipunctata</i>	2,900	9,110	36,700	0.32	0.079	
<i>Ditylum brightwellii</i>	911	6,250	35,000	0.15	0.026	
	813	6,830	32,000	0.12	0.025	
	1,485	16,320	120,000	0.09	0.012	
	1,370	9,832	54,600	0.14	0.025	
	1,220	11,440	89,400	0.11	0.014	
	<i>Rhizosolenia setigera</i>	820	5,882	13,200	0.14	0.062
<i>Rhizosolenia setigera</i>	2,140	26,500	174,000	0.08	0.012	
	3,040	24,900	150,000	0.12	0.020	
	1,240	10,762	37,000	0.12	0.034	
<i>Coscinodiscus</i> sp.	20,800	42,200	600,000	0.49	0.035	
<i>Coscinodiscus concinnus</i>	111,000	192,400	6,200,000	0.58	0.018	
	117,000	178,000	5,290,000	0.66	0.023	