

Species	Exact Mass	Abundance
1H	1.0078503	99.985
2H	2.01410178	0.015
3He	3.01602930	0.000137
4He	4.00260323	99.999863
6Li	6.015122	7.5
7Li	7.016003	92.5
9Be	9.0121822	100.000
10B	10.0129372	19.9
11B	11.0093056	80.1
12C	12.00000000	98.90
13C	13.00335483	1.10
14N	14.00307400	99.634
15N	15.00010896	0.366
16O	15.99491462	99.762
17O	16.9991314	0.038
18O	17.999160	0.200
19F	18.9984032	100.000
20Ne	19.992434	90.48
21Ne	20.993841	0.27
22Ne	21.991382	9.25
23Na	22.989767	100.000
24Mg	23.985042	78.99
25Mg	24.985837	10.00
26Mg	25.982594	11.01
27Al	26.981538	100.000
28Si	27.976927	92.23
29Si	28.976494	4.67
30Si	29.973770	3.10
31P	30.973762	100.000
32S	31.9720705	95.02
33S	32.9714583	0.75
34S	33.9678685	4.21
36S	35.9670808	0.02
35Cl	34.96885272	75.77
37Cl	36.9659026	24.23
36Ar	35.967546	0.337
38Ar	37.962732	0.063
40Ar	39.962384	99.600
39K	38.963708	93.258
40K	39.9640022	0.0117
41K	40.961827	6.7302
40Ca	39.962592	96.941
42Ca	41.958618	0.647
43Ca	42.958767	0.135
44Ca	43.955481	2.086
46Ca	45.953687	0.004
48Ca	47.952535	0.187
45Sc	44.955910	100.000
46Ti	45.952630	8.0
47Ti	46.951764	7.3
48Ti	47.947947	73.8
49Ti	48.947871	5.5
50Ti	49.944792	5.4
50V	49.947162	0.250
51V	50.943962	99.750
50Cr	49.946047	4.345
52Cr	51.940511	83.789
53Cr	52.940652	9.501
54Cr	53.938884	2.365
55Mn	54.938048	100.000
54Fe	53.939613	5.8
56Fe	55.934940	91.72
57Fe	56.935396	2.2
58Fe	57.933278	0.28
59Co	58.933198	100.000
58Ni	57.935346	68.077
60Ni	59.930788	26.223

61Ni	60.931053	1.140
62Ni	61.928346	3.634
64Ni	63.927968	0.926
63Cu	62.929599	69.17
65Cu	64.927792	30.83
64Zn	63.929144	48.6
66Zn	65.926035	27.9
67Zn	66.927129	4.1
68Zn	67.924846	18.8
70Zn	69.925324	0.6
69Ga	68.925580	60.108
71Ga	70.924703	39.892
70Ge	69.924249	21.23
72Ge	71.922079	27.66
73Ge	72.923462	7.73
74Ge	73.921177	35.94
76Ge	75.921401	7.44
75As	74.921594	100.000
74Se	73.922474	0.89
76Se	75.919212	9.36
77Se	76.919912	7.63
78Se	77.917307	23.78
80Se	79.916519	49.61
82Se	81.916697	8.73
79Br	78.918336	50.69
81Br	80.91629	49.31
78Kr	77.92040	0.35
80Kr	79.91638	2.25
82Kr	81.91348	11.6
83Kr	82.914137	11.5
84Kr	83.911509	57.0
86Kr	85.910615	17.3
85Rb	84.911794	72.165
87Rb	86.909186	27.835
84Sr	83.913429	0.56
86Sr	85.909266	9.86
87Sr	86.908883	7.00
88Sr	87.905618	82.58
89Y	88.905848	100.000
90Zr	89.904702	51.45
91Zr	90.905643	11.22
92Zr	91.905038	17.15
94Zr	93.906314	17.38
96Zr	95.908275	2.80
93Nb	92.906376	100.000
92Mo	91.906807	14.84
94Mo	93.905085	9.25
95Mo	94.905841	15.92
96Mo	95.904678	16.68
97Mo	96.906020	9.55
98Mo	97.905407	24.13
100Mo	99.90748	9.63
Tc	----	----
96Ru	95.90760	5.52
98Ru	97.90529	1.88
99Ru	98.905939	12.7
100Ru	99.904220	12.6
101Ru	100.905582	17.0
102Ru	101.904349	31.6
104Ru	103.905429	18.7
103Rh	102.905503	100.000
102Pd	101.90562	1.02
104Pd	103.90403	11.14
105Pd	104.90508	22.33
106Pd	105.90348	27.33
108Pd	107.903894	26.46
110Pd	109.90516	11.72
107Ag	106.90509	51.839
109Ag	108.904755	48.161
106Cd	105.90546	1.25
108Cd	107.90418	0.89
110Cd	109.903005	12.49
111Cd	110.904182	12.80
112Cd	111.902758	24.13
113Cd	112.904402	12.22

114Cd	113.903358	28.73
116Cd	115.904756	7.49
113In	112.904060	4.3
115In	114.903876	95.7
112Sn	111.90482	0.97
114Sn	113.902761	0.65
115Sn	114.903345	0.34
116Sn	115.901743	14.53
117Sn	116.902953	7.68
118Sn	117.901606	24.23
119Sn	118.903309	8.59
120Sn	119.902197	32.59
122Sn	121.903440	4.63
124Sn	123.905274	5.79
121Sb	120.903820	57.36
123Sb	122.904215	42.64
120Te	119.90404	0.096
122Te	121.903052	2.603
123Te	122.904271	0.908
124Te	123.902818	4.816
125Te	124.904429	7.139
126Te	125.903310	18.95
128Te	127.904464	31.69
130Te	129.906229	33.80
127I	126.904475	100.000
124Xe	123.905894	0.10
126Xe	125.90427	0.09
128Xe	127.903531	1.91
129Xe	128.904780	26.4
130Xe	129.903509	4.1
131Xe	130.905069	21.2
132Xe	131.904141	26.9
134Xe	133.90540	10.4
136Xe	135.90722	8.9
133Cs	132.90544	100.000
130Ba	129.90629	0.106
132Ba	131.90504	0.101
134Ba	133.90449	2.417
135Ba	134.90567	6.592
136Ba	135.90456	7.854
137Ba	136.90582	11.23
138Ba	137.90524	71.70
138La	137.90711	0.0902
139La	138.906347	99.9098
136Ce	135.90714	0.19
138Ce	137.90599	0.25
140Ce	139.905434	88.48
142Ce	141.909241	1.08
141Pr	140.90768	100.000
142Nd	141.907719	27.13
143Nd	142.909810	12.18
144Nd	143.910083	23.8
145Nd	144.912570	8.3
146Nd	145.913113	17.19
148Nd	147.916889	5.76
150Nd	149.920888	5.64
144Sm	143.911997	3.1
147Sm	146.914894	15.0
148Sm	147.914819	11.3
149Sm	148.917181	13.8
150Sm	149.917273	7.4
152Sm	151.919729	26.7
154Sm	153.922206	22.7
151Eu	150.919846	47.8
153Eu	152.921226	52.2
152Gd	151.919788	0.20
154Gd	153.920862	2.18
155Gd	154.922619	14.8
156Gd	155.922119	20.47
157Gd	156.923957	15.65
158Gd	157.924100	24.84
160Gd	159.927050	21.86
159Tb	158.925344	100.000
156Dy	155.92428	0.06
158Dy	157.924403	0.10
160Dy	159.925194	2.34
161Dy	160.926931	18.9
162Dy	161.926796	25.5

163Dy	162.928729	24.9
164Dy	163.929173	28.2
165Ho	164.930320	100.000
162Er	161.928776	0.14
164Er	163.929199	1.61
166Er	165.930292	33.6
167Er	166.932047	22.95
168Er	167.932370	26.8
170Er	169.935463	14.9
169Tm	168.934213	100.000
168Yb	167.933897	0.13
170Yb	169.934761	3.05
171Yb	170.936325	14.3
172Yb	171.936380	21.9
173Yb	172.938209	16.12
174Yb	173.938861	31.8
176Yb	175.942565	12.7
175Lu	174.940771	97.41
176Lu	175.942680	2.59
174Hf	173.940042	0.162
176Hf	175.941404	5.206
177Hf	176.943219	18.606
178Hf	177.943697	27.297
179Hf	178.945813	13.629
180Hf	179.946548	35.100
180Ta	179.947462	0.012
181Ta	180.947994	99.988
180W	179.946702	0.13
182W	181.948202	26.3
183W	182.950221	14.3
184W	183.950929	30.67
186W	185.954358	28.6
185Re	184.952952	37.40
187Re	186.955747	62.60
184Os	183.952487	0.02
186Os	185.953835	1.58
187Os	186.955744	1.6
188Os	187.955832	13.3
189Os	188.958140	16.1
190Os	189.958439	26.4
192Os	191.961469	41.0
191Ir	190.960585	37.3
193Ir	192.962916	62.7
190Pt	189.95992	0.01
192Pt	191.961027	0.79
194Pt	193.962655	32.9
195Pt	194.964766	33.8
196Pt	195.964926	25.3
198Pt	197.967867	7.2
197Au	196.966543	100.000
196Hg	195.965806	0.15
198Hg	197.966743	9.97
199Hg	198.968254	16.87
200Hg	199.968300	23.10
201Hg	200.970276	13.18
202Hg	201.970617	29.86
204Hg	203.973467	6.87
203Tl	202.972320	29.524
205Tl	204.974401	70.476
204Pb	203.973020	1.4
206Pb	205.974440	24.1
207Pb	206.975871	22.1
208Pb	207.976627	52.4
209Bi	208.980373	100.000
232Th	232.038051	100.000
234U	234.040947	0.0055
235U	235.043924	0.7200
238U	238.050785	99.2745

Adapted from:
 De Bièvre, P.; Taylor, P.D.P.; *International Journal of Mass Spectrometry and Ion Processes*, **1993**, *123* 149-166. And
Nuclides and Isotopes, Fourteenth Ed.;
 Walker, F.W.; Parrington, J.R.; Feiner, F.;
 General Electric Company, San Jose, California,
 1989.