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A Quick Review of the Atom

Nucleus

Protons - Charge of +1 ecu



Mass of 1 amu

Neutrons - No Charge



Mass of 1 amu

Electron Cloud

Electrons - Charge of -1 ecu



Mass of 1/1836 amu



Periodic Table



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Standard Nuclear Notation

Standard Nuclear Notation or Standard Atomic notation is used in chemistry and physics to indicate the atomic number and mass number of an isotope.

Nuclear notation is formed by writing an elemental symbol preceded by a subscript indicating its atomic number (number of protons) and a superscript indicating its mass number (number of nucleons).

For example, carbon-12 has an atomic number of 6 and a mass number of 12.

It is common to drop the atomic number. It is redundant with the symbol.



Let's Practice using Standard Nuclear Notation



Building a 3D Periodic Table

99	Es237	Es238 4.985	Es239 7.195	Es240	Es241 85	Es242	Es243	Es244 375	Es245	Es246	Es247 4.55m	Es248	Es249	Es250	Es251
98	Cf236 9.985	Cf237	Gf238	Cf239	Cf240	Cf241 3.78m	Cf242 3.49m	Cf243	Cf244	Cf245	Cf246	Cf247 3.11h	Cf248 333.5d	Cf249 350.6v	Cf250 13.08y
97	Bk235 14.35	Bk236 22.55	Bk237 31.95	Bk238 2.4m	Bk239 1.65m	Bk240	Bk241 9.08m	Bk242	BK243	Bk244 4.35h	BK245	Bk246	Bk247 1380v	Bk248	Bk249 320d
96	Cm234	Cm235	Cm236	Cm237 3.98m	Cm238	Cm239	Cm240	Cm241 32.8d	Cm242	Cm243	Cm244 18.1v	Cm245 8500y	Cm246 4730v	Cm247 1.56e+07v	Cm248 3.4e+05u
95	Am233	Am234	Am235	Am236	Am237	Am238	Am239	Am240	Am241 432.2y	Am242	Am243 7370y	Am244	Am245	Am246	Am247
94	Pu232	Pu233	Pu234 8.8h	Pu235 25.3m	Pu236 2.858y	Pu237 45.2d	Pu238 87.749	Pu239 2.41e+04y	Pu240 65649	Pu241	Pu242 3. 73e+05y	Pu243	Pu244 8. 08e+07y	Pu245	Pu246
93	Np231 48.8m	Np232	Np233 36.2m	Np234	Np235 1.084y	Np236	Np237 2.14e+06y	Np238	Np239 2.356d	Np240	Np241 13.9m	Np242 5.5m	Np243 1.85m	Np244 2.29m	Np245 1.7m
92	U 230 20.84	U 231 4.2d	U 232 68.9v	U 233 1.59e+05v	U 234 0.0055	U 235 0.72	U 236 2.34e+07v	U 237 6.75d	U 238 99.2745	U 239 23.45m	U 240	U 241 18.4m	U 242	U 243 4.54m	U 244 57.95
91	Pa229	Pa230	Pa231 3.28e+04v	Pa232	Pa233	Pa234	Pa235	Pa236	Pa237 8.7m	Pa238	Pa239	Pa240 26.65	Pa241	Pa242 21.2≤	Pa243 12≤
90	Th228	Th229 7880y	Th230 7.54e+04v	Th231	Th232	Th233	Th234	Th235	Th236	Th237	Th238	Th239 415	Th240	Th241 16.7≤	Th242 4.545
89	AC227	AC228	Ac229	Ac230 2.033m	Ac231 7.5m	Ac232	Ac233 2.417m	Ac234 44s	Ac235 18.15	Ac236 5.55s	Ac237 9.875	Ac238 5.01s	Ac239 3.14s	Ac240 3.65s	
88	Ra226	Ra227	Ra228	Ra229	Ra230	Ra231	Ra232 4.167m	Ra233	Ra234 305	Ra235 13.75	Ra236	Ra237 7.015			-
87	Fr225	Fr226	Fr227	Fr228	Fr229 50.25	Fr230	Fr231 17.5s	Fr232	Fr233 5.9≤	Fr234 3.895	Fr235 3.625		-		
86	Rn224	Rn225	Rn226	Rn227	Rn228	Rn229 25.95	Rn230	Rn231 15.2≤	Rn232 7.015			-			
85	At223	At224	At225 18.5s	At226	At227	At228	At229								
84	Po222 2.24m	Po223	Po224	Po225 33.35	Po226 8.965			_						РЪ	
83	Bi221 9.48≤	Bi222 4.985	Bi223 5.05s	Bi224 3.915		_									126

Chart of the Nuclides

О Не

F



Interactive Nucleus at the Ruth Patrick Science Education Center at the University of South Carolina- Aiken













You have made: Neon-18

18 10**Ne**

This form of Neon is Received Remits I Gamm









