

## Periodically Puzzling

Below you are given a list of letters and clues. You are also given a periodic table representing elements in the first four periods (minus the transition metals). Using what you know about the periodic table, assign each letter a space on the blank periodic table.

A	Atoms of this element contain more proton than J	N	Atoms of this element fulfill the octet rule. This particular atom has one more proton than H.
B	This element has atoms that have the same formula as an alpha particle	O	Shares similar chemical properties with U and H
C	Forms -2 anions and is in period 3	P	A alkaline earth metal in period 4
D	Alkali metal in period 2	Q	Forms a +3 cation, has less protons than S but more than A
E	Out of all of the stable atoms, this one has the most protons	R	Period 3 and forms -3 anion
F	Atoms of this element contain one more proton than Q	S	3 valence electrons and has the most protons and electrons of any atom in its family/group
G	Forms -2 anions and in period 2	T	Period 4 and forms -2 anions
H	Has 7 valence electrons, has more protons than U but less total electrons than O	U	A halogen in the second period
I	Very reactive atom. Atoms of this element have more protons than any other element in this family	V	The only stable atom in period 2
J	Alkaline earth metal with the least amount of total electrons	W	This atom only has one proton in its nucleus
K	Shares similar chemical properties with I, can be found in period 3	X	Period 4, could possible form both a cation and anion
L	Can form + or - 4 ions and found in period 2	Y	Shares similar chemical properties with J but has less protons than Q
M	Same period as L but forms -3 ion	Z	Forms -3 anion in period 4

Name \_\_\_\_\_

Period \_\_\_\_\_

	1A 1	2A 2	3A 13	4A 14	5A 15	6A 16	7A 17	8A 18
1								
2								
3								
4								