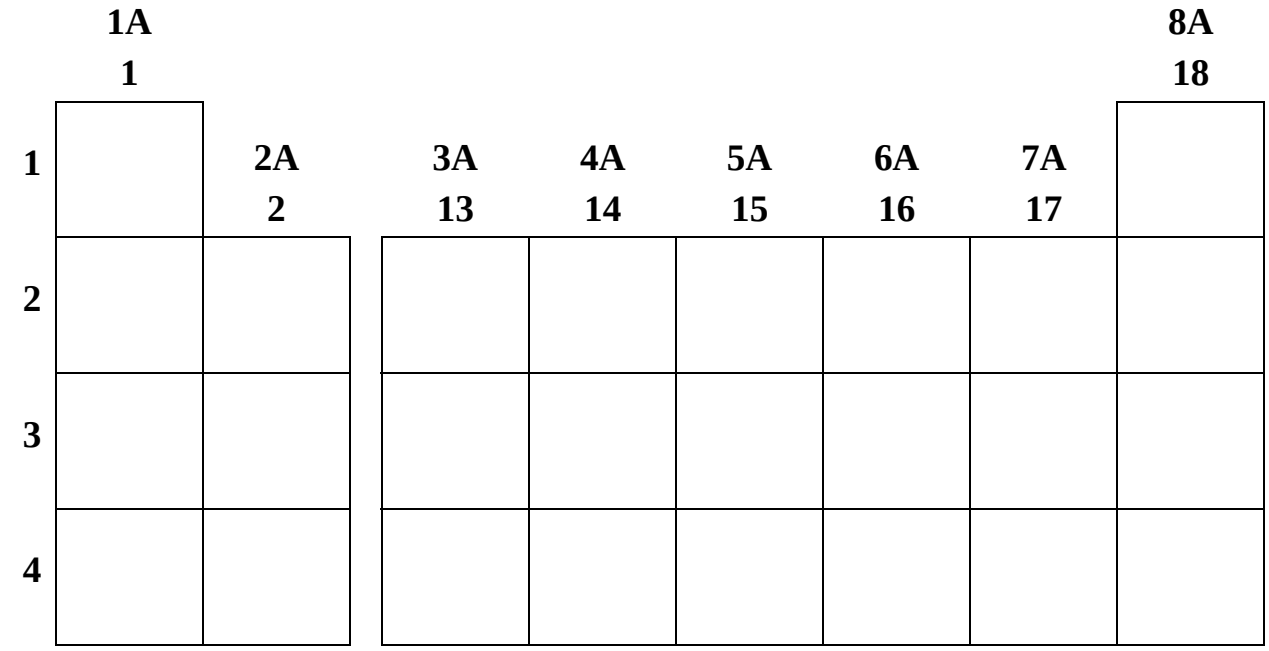
Name _____ Period _____ Date _____

Periodically Puzzling

You have been given a list of code letters and clues that correspond to the representative elements in the first four periods of the periodic table. Place each code letter in its proper space in the partial periodic table below. NOTE: The code letters fall into these groups on the periodic table: JKQ, WNVG, IAL, EPFZ, YBR, ODS, CXU, THM.

CODE LETTER	CLUE
V	has largest ionization energy in its period.
E	is the largest atom in its period.
U	has 7 valence electrons in the second energy level.
D	has 5 valence electrons.
J	has 2 valence electrons.
T	has 6 valence electrons in the fourth energy level.
A	has 4 valence electrons in the second energy level.
R	has an atomic number one less than A.
O	has an atomic number one more than A.
S	has 18 more protons in its nucleus than D.
F	has a single electron in the first energy level.
Y	has atoms that are larger than the atoms of B.

CODE LETTER	CLUE
I	has the smallest first ionization energy in its group.
C	has atoms that are larger than those of U, but smaller than those of X.
V	has one more proton in its nucleus than U.
H	has the largest first ionization energy in its group.
G	has two protons in each atom.
N	has a full third energy level.
J	has valence electrons in the second energy level.
Q	has an atomic mass greater than that of J and less than that of K.
E	has an atomic number less than that of Z but greater than that of P.
Z	is the largest atom in its group.