

Name: _____ Block: _____

Periodic Table Mystery.

Procedure: Place the unknown main group elements on the blank periodic table using the clues provided. See if you understand the patterns. The following sets of elements belong together in groups but not necessarily in this order:

ZRD, SIFP, JXBE, LHT, QKA, WOV, GUN, YMC

Clues:

1. U has a total of 6 electrons in its neutral atom
2. Element A is the second most common element in the atmosphere and found in water
3. E is a noble gas
4. S is an alkali metal
5. P burns pink-purple & has four neutrons
6. W is a liquid at room temperature
7. Z has the highest ionization energy in its group & is a metalloid
8. J has 36 protons
9. O has an atomic number larger than V but smaller than W
10. V has a higher ionization Energy than O
11. D has the largest atomic mass of its group
12. C has 5 electrons in its outer energy level
13. F is a colorless gas
14. O is a halogen
15. X has an atomic number one higher than F
16. Y is a metalloid
17. B glows **BRIGHT** red-orange
18. The atomic mass of L is less than that of T.
19. J has an atomic number 3 times that of T
20. R has a charge of +3 when not neutral
21. Q has an atomic mass 2 times that of A and an atomic mass less than that of K
22. Atoms of I are larger than those of S
23. H is good for your bones
24. M has a larger atomic radius than that of A, in same period
25. The electrons of atom N are distributed over 3 major energy levels
26. The atomic radius of K is the largest of the group
27. G has a lower electronegativity than N
28. F is the lightest known element
29. The charge on L ion is + 2
30. R is smaller than T but bigger than N, in same period

