

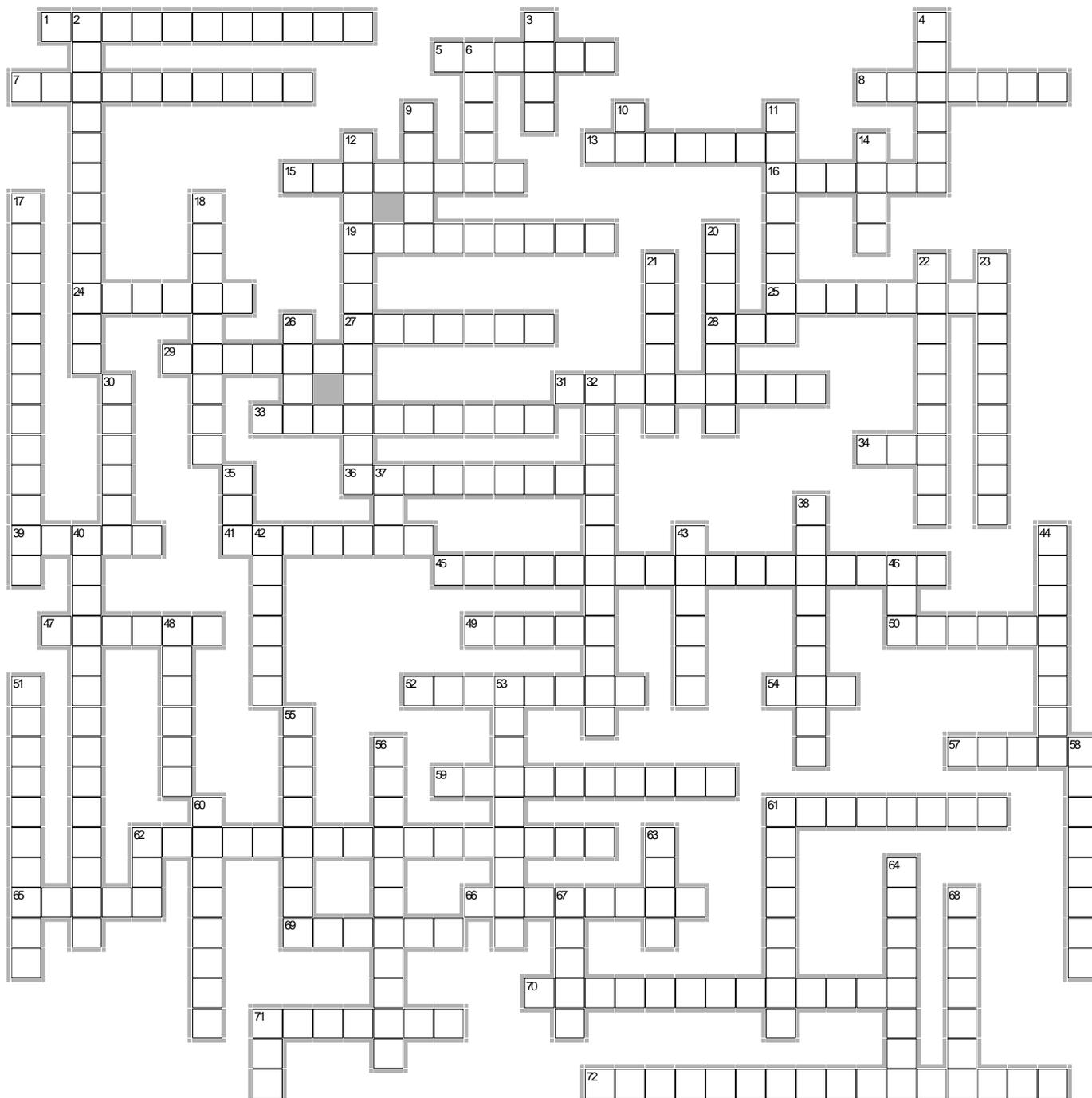
Exercise 5.3b

Periodic Table Crossword

Name: _____

Date: _____ Per: _____

DIRECTIONS: Fill in the crossword using the clues on the reverse side and your knowledge of the periodic table.



Exercise 5.3b

Periodic Table Crossword

Name: _____

Date: _____ Per: _____

Clues

Across

1. The top row of the inner-transition elements.
5. The alkali and alkaline-earth metals.
7. The least electronegative of (N,O,F,P,S,Cl).
8. The *Period 4* Alkaline-Earth Metal.
13. Metal that is liquid at room temperature.
15. Another name for *Group VIIA*.
16. Another name for the transition elements.
19. Another name for the row with thorium and uranium.
24. What an atom becomes when it gains electrons (size).
25. The number of groups on the periodic table.
27. Developed the concept of atomic number.
28. An atom that has gained or lost electrons.
29. Halogen that is liquid at room temperature.
31. The largest of these elements (Pd,Ni,Cu,Ag).
33. Elements that fall along the stair-step line.
34. Number of valence electrons in the family with the lowest ionization energies.
36. The *Period 5* alkaline-earth metal.
39. The number of valence electrons in the 3p-block metal.
41. The *Period 3* metalloid.
45. The attraction of an atom to electrons in a chemical bond.
47. A name for the columns of the periodic table.
49. The state of most metals.
50. The smallest atom in this list (Fe,Ni,V,Pd)
52. The element with the lowest ionization energy.
54. On a graph of ionization energies, the noble gases would be located at the ____.
57. Period with only two elements.
59. Elements that share the properties of both metals and non-metals.
61. Which does not belong in this set? (K,Ca,Sc)
62. Another name for the *d-block* elements.
65. The number of valence electrons in a halogen.
66. The element with the highest electronegativity.
69. The biggest classification of elements.
70. A material whose conductivity lies between that of a metal and non-metal – used in computer chips.
71. What an atom gets when it loses electrons and becomes a positive ion (size).
72. The amount of energy required to strip electrons from an atom.

Down

2. Used to place the elements in order on the periodic table.
3. Reactivity of the alkali metals increases moving ____ the family.
4. The lanthanides and actinides.
6. The *Group IIIA* semi-metal.
9. The number of valence electrons found in almost all noble gases.
10. The only Noble Gas with only 2 valence electrons.
11. The element that should be its own family.
12. Group of elements with the lowest ionization energies.
14. Number of valence electrons in lead.
17. The metals represented by *Group IIA*.
18. The idea that atoms tend to gain, lose or share electrons to achieve a full valence shell.
20. The rows of the periodic table.
21. A group of elements with similar chemical properties.
22. Commonly credited for developing the modern periodic table.
23. The attraction of an atom to electrons _____ as you move from lower left to upper right in the periodic table.
26. Number of valence electrons in phosphorus.
30. The *Period 5* halogen.
32. The size of an atom - it gets smaller nearer to helium.
35. The state of most non-metals at room temperature.
37. The number of valence electrons in an alkaline-earth metal.
38. Another name for the combined *s* and *p-blocks*.
40. Another name for the combined *s* and *p-blocks*.
42. The biggest of these elements (Ga,Sb,In,As,S).
43. The smallest noble gas.
44. A stable atom with a filled octet.
46. A *p-block* metal.
48. Where most of the non-metals are located.
51. The family with the highest ionization energies.
53. The class of elements that tend to be gases, non-conductive, and brittle.
55. The only metal on the stair-step line.
56. Another name for *Group IIIA*.
58. The element with the lowest ionization energy in this list (W,P,Cd,Cr,Te).
60. Which does not belong in this set? (Ta,Pa,Th,U,Sm,Ce)
61. Which does not belong in this set? (Si,Ge,As,Se,Sb)
62. Number of groups in the transition metals or *d-block*.
63. The last element in the *3d-block*.
64. The *Period 3* halogen.
67. A full valence shell.
68. The name of the electrons in the outermost energy level.
71. Number of groups in the *p-block*.