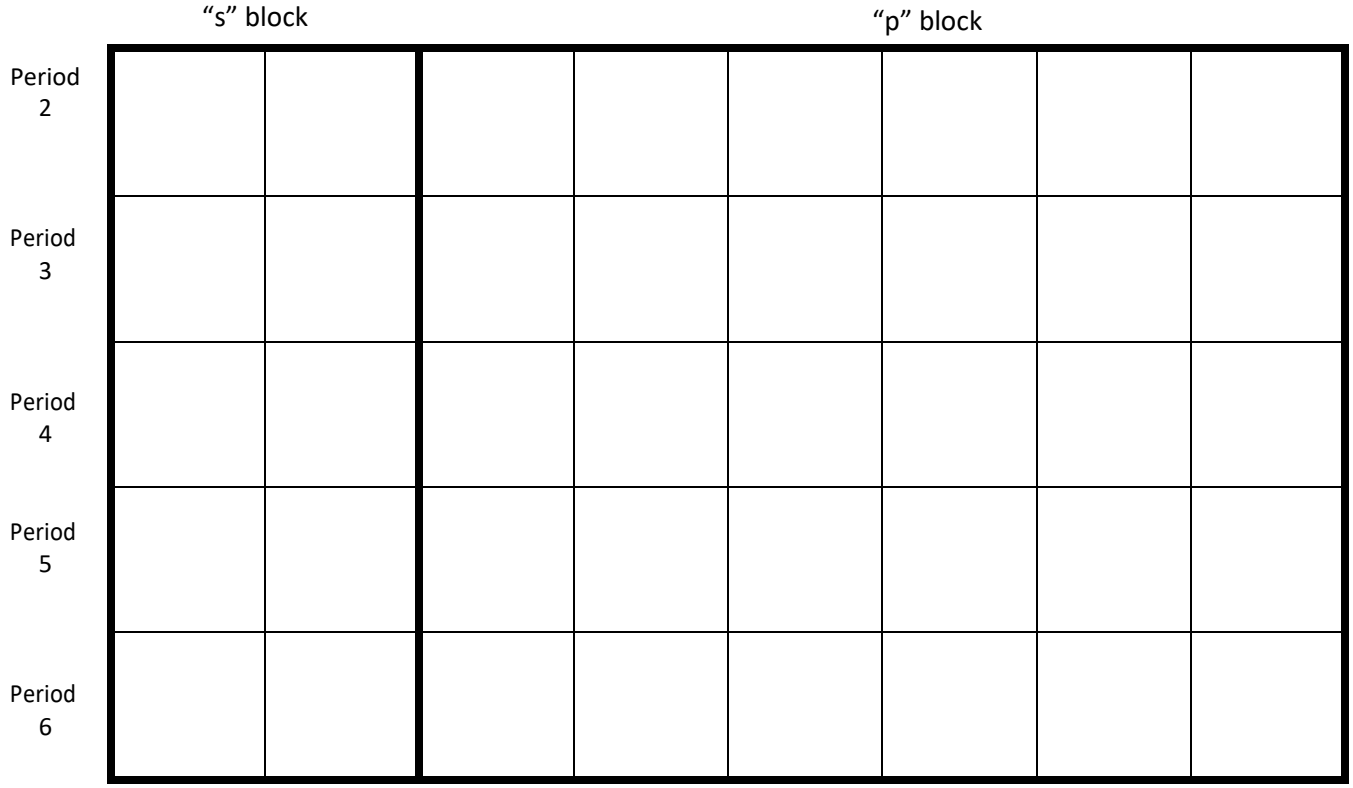
Dougherty Valley HS Chemistry
Periodic Table Puzzle

Worksheet #8

Name: **Period:** **Seat#:**

On the blank chart below, you are to fill in the letters of the imaginary elements A – NN according to the clues below. Not all elements will have a clue. Use your knowledge of the periodic table and its organization to fill in the "elements."
Your "Periodic Table" represents periods 2-6 of the s and p blocks of the real periodic table.
The "elements" below follow the same patterns that the actual elements on the periodic table follow.



Clues:

1. The "elements" are grouped in the following Families:

A B C D E **P Q R S T** **EE FF GG HH II**
F G H I J **U V W X Y** **JJ KK LL MM NN**
K L M N O **Z AA BB CC DD**

2. **Y** is the most electronegative element.
3. **GG** is the most reactive metal and the least electronegative element.
4. If **K** lost 4 electrons, it would look like **E**, the smallest Noble Gas.
5. If **I** gained 2 electrons, it would look like **A**, and if it had 2 less protons, it would be **K**.
6. **BB** is the biggest element in its family.
7. **AA** is smaller than **K** but bigger than **I**.
8. **CC** is the only element in its group that is diatomic.
9. If **NN** lost 1 electron, its electrons would fill ONLY the s sublevel.
10. **JJ** Is the second biggest element in its family.
11. **S** is in the same period as **JJ**.
12. **Z** and **L** are not in the same period.
13. **B** is the largest noble gas.
14. If **II** were a real element, it would only have 3 electrons.
15. **FF** is in the same period with **U** but not **O**.
16. **H** is to **JJ** as **I** is to **KK**.
17. **U** has a larger ionization energy than **I**.
18. **M**'s valence electrons are in the 4th energy level.
19. The shielding effect for **EE** is greater than for **HH**.
20. **F** is the smallest element in the group that would form charges of -2.
21. **G** gains 2 electrons to look like **B**.
22. **P**'s atomic number is 1 more than **GG**.
23. **T** is not in the same period with **Z**.
24. **L** is not in the same period as **GG**, but is in the same period with C.
25. When **W** gains 1 electron, it's a $4p^6$.
26. **R** has 1 less energy level than **M**.
27. The valence electrons for **X** and **LL** are not in the same energy level.
28. **MM** and **Z** are in the same period.
29. **N** is in the same period as **LL** but not **CC**