Information on Periodic Table

Chem Worksheet 6-2

Name _____

Starting with a blank periodic table, follow these instructions.

1. Draw a large box around the metals and label it "Metals"

2. Draw a large box around all of the non-metals and label it "Non-metals".

3. Lightly shade in the boxes for each of the semi-metals.

4. Make a box using the letter "G" around the second group of the periodic table.

5. Make a box using the letter "P" around the third period of the periodic table.

6. Write a "4" above the column (group) containing elements with four valence electrons.

7. Write a "2" above the column (group) containing elements with two valence electrons.

8. Make a box using the letter "T" around the transition metals of the periodic table.

9. Make a box using the letter "I" around the inner-transition metals of the periodic table.

10. At the top of the appropriate families write the following names: "noble gases", "halogens", "alkali metals", and "alkaline Earth metals"

11. Write a check mark in the box for each of the eight diatomic elements.

12. Make a star in the box for each of the elements that exist as liquids at room temperature.

13. Make a large dot in the box for each of the elements that exist as gases at room temperature.

14. Place a triangle in the box for each of the radioactive elements.

15. Write a "+2" above the column (group) containing elements that tend to form +2 ions.

16. Write a "–2" above the column (group) containing elements that tend to form –2 ions.

17. Draw a horizontal and vertical solid arrow that shows the pattern for increasing ionization energy for elements on the periodic table.

18. Draw a dotted horizontal and a dotted vertical arrow that shows the pattern for increasing atomic radius for the elements on the periodic table.

19. Make a dashed circle around the column (group) containing elements that have exactly three dots in the Lewis structures.

20. Make a cloud-shaped oval around the elements the make up the *s* block of the periodic table. Label these elements "*s*- block"

21. Repeat the previous step for the *p*- block, the *d*-block, and the *f*-block.

22. Make several circles around the element with the following electron configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^6$