

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## PERIODIC TABLE AND BONDING STUDY GUIDE

Use your Reading Checksheets, workbooks, and the lessons in the book from this unit to answer the questions below on a separate piece of paper. The test will assess your knowledge of these concepts.

The lessons from the book that we've covered this unit are: 16-3, 18-1, 18-2, 18-3

1. Where are metals, metalloids, and non-metals on the periodic table?
2. What are the differences between metals and non-metals?
3. Using the periodic table, how do you determine an element's number of neutrons?
4. Using the periodic table, how do you determine an element's number of valence electrons?
5. What are the parts of an atom? Where are they located? What are their charges? What are their masses?
6. What do you call the rows and columns on the periodic table?
7. As you go from left to right across the periodic table, how do the properties of elements change?
8. Do noble gases form stable bonds? Why or why not?
9. What do elements in the same group have in common? Why?
10. What do electron dot diagrams represent?
11. How many electrons are in each energy level?
12. Why do atoms form bonds?
13. What are the two ways that atoms form bonds? What happens to electrons in these bonds?
14. What are ions? How are they formed?
15. What are molecules?
16. What does an element's oxidation number mean?
17. How do you name ionic compounds?
18. How do you name covalent compounds?
19. What causes polar covalent bonds?
20. How do electron dot diagrams show ionic compounds? (show NaCl as an example)