Name_____Date_____Hour_____

Reading Guide Chapter 3

Section 3.1 Development of the Periodic Table

1. What is the main idea of the chapter?
2. How many elements had been discovered by the 1860's?
3. How did chemists organize the elements that were known?
4. How were Dobereiner's triads organized?
5. How did Mendeleev first organize his periodic table?
6. Why did he leave blank spaces in his table?
7. What is periodicity? Give at least one example.
8. How did Moseley change the periodic table?
9. How does atomic number change as you move left to right in the modern periodic table?

Section 3.2 Using the Periodic Table

10. What is the main idea of this section?
11. How are elements arranged in the modern periodic table?
12. What is a period? What is a group?
13. Why is group 18 called the noble gases?
14. How are period number and valence energy level related?
15. Why do elements in the same groups have similar properities?
16. What common names do we use to identifity specific groups of the peridoic table?
17. What other information about each element can be found on the peridoic table?
18. Look at the periodic table on pg 90 and 91, which two elements are liquids at room temperature? Name 3 elements that are gases at room temperature.
19. Name 5 elements that are synthetic. What does this mean?
20. What are metals? Where are they located on the periodic table?
21. What are transition elements?
22. What is another name for the lanthanide series?
23. The actinides are located below the lanthanides, what is one unique property that all of the elements in the actinide series share?
24. What's a nonmetal? Where are they located on the periodic table?
25. What are metalloids? Where are they located on the periodic table?
26. What factors determine how an element will behave?
27. What happens to the valence electrons of metals during a chemical reaction? What happens to the nonmetals' valence electrons during a chemical reaction?
28. What is an electrical current?
29. Why do most metals conduct electricity?
30. Elements combine to form compounds, what determines how these combinations happen?