

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Chapter C3 Review**

**Atoms and the Periodic Table**

1. Atom
2. Electron
3. Nucleus
4. Proton
5. Energy level
6. Neutron
7. Atomic Number
8. Isotope
9. Mass Number
10. Atomic Mass
11. Periodic table
12. Chemical Symbol
13. Period
14. Group
15. Metal
16. Nonmetal
17. Metalloid
18. Transition Metal

19. How did the atomic theory change throughout the years?

20. What did Rutherford's gold foil experiment reveal about the atom?

21. How is Bohr's Model of the atom different from the current model?

22. What are energy levels?

23. How are energy levels filled:

- a. Level 1 (closest to the nucleus) can hold a maximum of \_\_\_\_\_
- b. Level 2 can hold a max of \_\_\_\_\_
- c. Level 3 can hold a max of \_\_\_\_\_
- d. Level 4 can hold a max of \_\_\_\_\_

24. What are the subatomic particles that make up the atom?

25. What is an AMU?

26. Fill in the chart:

Subatomic particle	Proton	Neutron	Electron
Abbreviation/symbol			
Location			
Charge			
Mass			

27. How is the number of protons in an atom related to the atomic number?

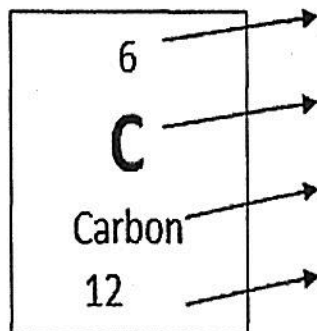
28. What is true about the number of electrons in a neutral atom?

29. How did Mendeleev organize elements in his periodic table?

30. How did Moseley organize elements in the current periodic table? How are the elements grouped?

31. How are chemical symbols written? Give 2 examples of each type.
32. What 2 names are used for the vertical columns in the periodic table?
33. What 2 things are true for the members in a column?
34. What are the horizontal rows called?
35. Where are metals found in the periodic table?
36. Where are nonmetals found in the periodic table?
37. How does reactivity change as you go across a row from left to right?
38. What are 5 characteristics of metals?
39. What are 3 characteristics of nonmetals?
40. Where are halogens located? Are they reactive or nonreactive?
41. Where are noble gases located? Are they reactive or nonreactive?
42. What are metalloids?
43. Where are metalloids located?

44. Label this box from periodic table:



45. Fill in the following:

- atomic number = \_\_\_\_\_
- mass number = \_\_\_\_\_
- # neutrons = \_\_\_\_\_
- # electrons = \_\_\_\_\_