


**Chapter
Review**

Properties of Atoms and the Periodic Table

Part A. Vocabulary Review

Directions: *On the space at the left, write the term that correctly completes each statement. Use each term once.*

metals	isotopes	average atomic mass	electron cloud
groups	metalloids	transition elements	atomic number
electrons	nucleus	mass number	periods
chemical symbol	quarks	periodic table	

- _____ 1. A capital letter or a combination of a capital letter and a lowercase letter that is used to represent an element is called a(n) _____.
- _____ 2. The horizontal rows of elements are called _____.
- _____ 3. An average of the masses of all the isotopes that occur in nature for an element is the _____.
- _____ 4. Vertical columns of elements are called _____.
- _____ 5. Elements in the middle of the periodic table, Groups 4 through 7, are called the _____.
- _____ 6. The number of protons in an atom is the _____.
- _____ 7. Protons and neutrons can be subdivided into _____ by colliding them.
- _____ 8. The center of an atom where protons and neutrons are located is the _____.
- _____ 9. A total count of the neutrons and protons in an atom is the _____.
- _____ 10. Atoms of the same element but with different numbers of neutrons are _____.
- _____ 11. Elements that are found on the left side of the periodic table are _____.
- _____ 12. Elements that have some properties of both metals and nonmetals are _____.
- _____ 13. The particles that move about the nucleus and have a negative charge are _____.
- _____ 14. The region around the nucleus occupied by electrons is a(n) _____.
- _____ 15. A chart that shows the classification of elements is called the _____.

Chapter Review (continued)**Part B. Concept Review**

Directions: Complete the table by writing the correct information in the blank spaces.

Element	Chemical Symbol	Atomic Number	Number of Protons	Number of Neutrons	Mass Number
1. Sodium		11	11	12	23
2. Carbon	C		6	6	12
3.	Fe	26	26	30	56
4. Sulfur	S	16		16	32
5. Nitrogen	N	7	7		14
6. Oxygen	O	8	8	8	
7.	He	2	2	2	4
8. Chlorine-35	Cl	17	17		35
9. Copper	Cu	29	29	35	
10. Chlorine-37	Cl		17	20	37

Directions: Refer to the periodic table below and the boxes at the right of the table to answer questions 11–15.

	1																	18	
		2																	
			3	4	5	6	7	8	9	10	11	12							
A								Fe											
B																			

11	Na
23	

26	Fe
55.8	

79	Au
197	

- _____ 11. Which element has a greater atomic mass, A or B?
- _____ 12. Which element is a metal, B or C?
- _____ 13. In which group is gold?
- _____ 14. What is the average atomic mass of iron?
- _____ 15. What is the atomic number of sodium?