

CHAPTER REVIEWChapter **5****The Periodic Table****I. Vocabulary Review**

In the blank, write the word or words that best complete the sentence.

1. An early periodic table developed by _____ arranged the elements in order of increasing mass.
2. The number of protons an element contains is identified by the _____ found on the periodic table.
3. The sum of the number of _____ and protons in an element is called the mass number.
4. Hydrogen-1, hydrogen-2, and hydrogen-3 are all _____ of the element hydrogen.
5. The elements in Family 17 of the periodic table are known as the _____.
6. The noble gases are in the same _____ of the periodic table.
7. The elements lithium, sodium, potassium, rubidium, cesium, and francium are called _____.
8. Family 2 of the periodic table is called the _____.
9. The rows across the periodic table are called _____.
10. Elements in Families 3 through 12 are called _____.

II. Concept Review

In the blank at the left, write the letter of the choice that best completes the statement or answers the question.

- _____ 11. As you go from left to right in the periodic table, _____.
- a. the metallic properties of elements increase
 - b. the nonmetallic properties of elements increase
 - c. the atomic mass number always increases
 - d. the number of electrons in the outer energy level decreases
- _____ 12. How many protons are in a carbon atom?
- a. 6
 - b. 5
 - c. 12
 - d. 12.011
- _____ 13. A certain element has two isotopes. Forty percent of the atoms have an atomic mass of 35. Sixty percent of the atoms have an atomic mass of 37. What is the atomic mass of the element?
- a. 36.0
 - b. 36.2
 - c. 35.8
 - d. 72.0

Chapter Review 5 (continued)

- _____ 14. Period 1 of the periodic table contains _____.
a. 7 elements **c.** 2 elements
b. 8 elements **d.** 18 elements
- _____ 15. All _____ have 8 electrons in the outer energy level.
a. alkali metals **c.** nonmetals
b. metalloids **d.** noble gases
- _____ 16. Which of the following elements would have 2 electrons in the outer energy level?
a. hydrogen-2 **c.** oxygen
b. sodium **d.** calcium

III. Skills/Process Review

Use Figure 1 to answer the following questions.

17. What is the most common isotope of iodine found in nature?

18. How many outer energy level electrons does chlorine have? _____
19. Which element would be the most chemically active nonmetal?

20. Which family of elements would be the most stable chemically? Explain your answer. _____

	18
	2 He Helium 4.0026
17	
9 F Fluorine 18.998	10 Ne Neon 20.179
17 Cl Chlorine 35.453	18 Ar Argon 39.948
35 Br Bromine 79.904	36 Kr Krypton 83.80
53 I Iodine 126.905	54 Xe Xenon 131.29
85 At Astatine (210)	86 Rn Radon (222)

FIGURE 1

IV. EYV Review

21. Science and Society: Synthetic Elements Summarize the difficulties associated with the disposal of plutonium. _____

