

Let's Practice!

1. If the outer electron configuration of an element is $2s^1$, the element directly below it in the periodic table will have an outer electron configuration of:
2. Elements in the fourth period have the core electron configuration of the noble gas:
3. The number of valence electrons in beryllium, an alkaline earth metal is:
4. The element with an outer electron configuration of $1s^22s^22p^5$ is in the family:
5. Which of the following is an alkaline earth metal?
 - a. Na
 - b. Mg
 - c. Fe
 - d. Se
6. A comparison of lithium atoms with sodium atoms would indicate that they have
 - a. The same family
 - b. The same atomic number
 - c. The same atomic weight
 - d. The same energy levels
7. Which electrons account for many of the chemical and physical properties of elements?
 - a. Innermost
 - b. Intermediate
 - c. Outermost
 - d. Transition
10. The chemical family in which the outermost s and p orbitals are completely filled is called the:
11. The number of valence electrons in all elements in Group 14 is:
12. The number of valence electrons in chlorine is:
13. The most likely charge on the ion formed by iodine is _____ and by aluminum is _____.
14. Which of the following elements is not correctly paired with its group (family) name?
 - a. Bismuth (Bi), halogens
 - b. Strontium (Sr), alkaline earth metals
 - c. Lithium (Li), alkali metals
 - d. Radon (Rn), noble gases
15. Which of the following would be expected to have chemical properties similar to those of sulfur?
 - a. F
 - b. P
 - c. Mg
 - d. Se
16. The inertness of the noble gases is due to
 - a. The number and arrangement of their electrons
 - b. The unique structure of their nuclei
 - c. The special number of protons and neutrons
 - d. The bonds they form with other element