

6

THE PERIODIC TABLE

Chapter Quiz

Fill in the word(s) that will make each statement true.

1. In the modern periodic table, when elements are arranged according to their atomic 1, there is a periodic repetition of properties. 1. _____ 6.1
2. There are 2 periods in the periodic table. 2. _____ 6.1
3. The elements in any 3 in the periodic table have similar physical and chemical properties. 3. _____ 6.1
4. Oxygen and sulfur, Group 6A elements, have 4 electrons in their highest occupied energy level. 4. _____ 6.2
5. For the inner transition elements, electrons are added to an *f* sublevel with a principal energy level that is 5 than the period number. 5. _____ 6.2

Classify each of these statements as always true, AT; sometimes true, ST; or never true, NT.

- _____ 6. The atomic radius of an element in period 3 is larger than the atomic radius of an element in period 2. 6.3
- _____ 7. For Group 3A elements, there is a relatively small increase in ionization energy between the second and third ionization energies. 6.3
- _____ 8. Anions are smaller than the neutral atoms from which they are formed. 6.3
- _____ 9. Atoms with low electronegativity values tend to form positive ions. 6.3
- _____ 10. As a group, alkali metals have the highest electronegativities. 6.3