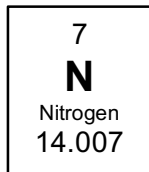


Atoms and Bonding

Directions: Use the diagrams to answer questions 1-5 in the spaces provided.



1. What is the atomic number of the element represented in the diagrams? _____
2. How many protons does the element have? _____
3. How many valence electrons does the element have? _____
4. Is the element reactive or stable? How do you know? _____

5. Is the element a metal or nonmetal? _____

Directions: From the list below, choose the term that best completes each sentence.

valence electrons
chemical bond

lose
gain

share

6. When metals react with other elements, the atoms of the metals _____ electrons.
7. A(n) _____ is the force of attraction that holds two atoms together.
8. When nonmetals react with metals, the atoms of the nonmetals _____ electrons.
9. When nonmetals react with other nonmetals, the atoms of the nonmetals _____ electrons.
10. _____ have the highest energy and are most loosely held by the atom.