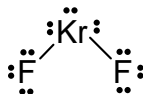


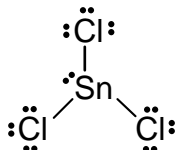
CHM 151
Recitation #11, 12 November 2008

Given the correct Lewis structure below, answer the following questions.



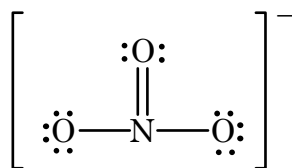
1. What is the *electron pair arrangement* of the central atom?
a) linear b) trigonal planar c) tetrahedral d) trigonal bipyramidal e) octahedral
2. What is the *geometry* about the central atom?
a) bent b) trigonal planar c) t-shaped d) linear e) trigonal bipyramidal
3. What is/are the *bond angle(s)* in the molecule?
a) 180° b) 90°, 120° c) 120° d) 90°, 180° e) 109°
4. What is the *polarity* of the molecule?
a) polar b) nonpolar
5. What *hybrid orbitals* are used by the central atom in bonding?
a) sp b) sp² c) sp³ d) sp³d e) sp³d²

Given the correct Lewis structure below, answer the following questions.



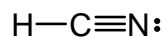
6. What is the *electron pair arrangement* of the central atom?
a) linear b) trigonal planar c) tetrahedral d) trigonal bipyramidal e) octahedral
7. What is the *geometry* about the central atom?
a) bent b) trigonal planar c) trigonal pyramid d) tetrahedral e) t-shaped
8. What is/are the *bond angle(s)* in the molecule?
a) 180° b) 90°, 120° c) 120° d) 90°, 180° e) 109°
9. What is the *polarity* of the molecule?
a) polar b) nonpolar
10. What *hybrid orbitals* are used by the central atom in bonding?
a) sp b) sp² c) sp³ d) sp³d e) sp³d²

Given the correct Lewis structure below, answer the following questions.



11. What is the *electron pair arrangement* of the central atom?
a) linear b) trigonal planar c) tetrahedral d) trigonal bipyramidal e) octahedral
12. What is the *geometry* about the central atom?
a) linear b) trigonal planar c) tetrahedral d) bent e) trigonal pyramid
13. What is/are the *bond angle(s)* in the molecule?
a) 90° b) 109° c) 120° d) 180° e) $109^\circ, 120^\circ$
14. What is the *polarity* of the molecule?
a) polar b) nonpolar
15. What *hybrid orbitals* are used by the central atom in bonding?
a) sp b) sp^2 c) sp^3 d) sp^3d e) sp^3d^2

Given the correct Lewis structure below, answer the following questions.



16. What is the *electron pair arrangement* of the central atom?
a) linear b) trigonal planar c) tetrahedral d) trigonal bipyramidal e) octahedral
 17. What is the *geometry* about the central atom?
a) trigonal pyramid b) trigonal planar c) linear d) tetrahedral e) bent
 18. What is/are the *bond angle(s)* in the molecule?
a) 90° b) 120° c) 109° d) 180° e) $90^\circ, 120^\circ$
 19. What is the *polarity* of the molecule?
a) polar b) nonpolar
 20. What *hybrid orbitals* are used by the central atom in bonding?
a) sp b) sp^2 c) sp^3 d) sp^3d e) sp^3d^2
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