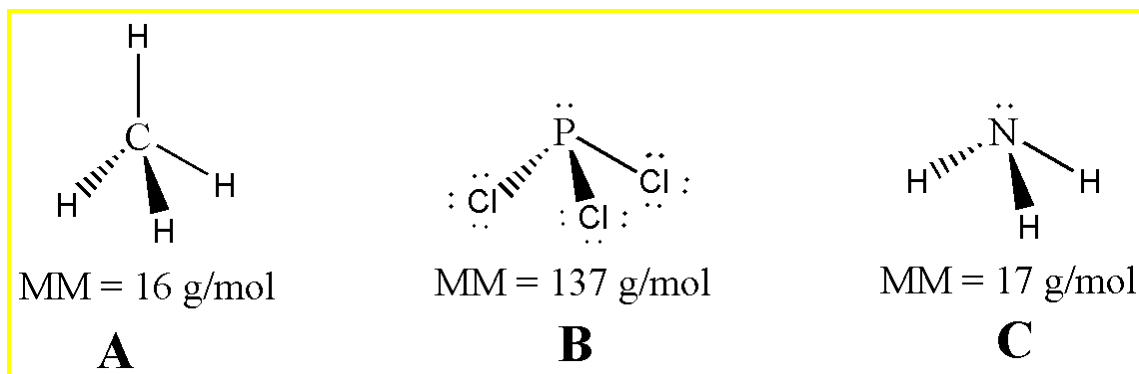


Directions: Choose the letter that corresponds to the correct answer.

1. What is the correct chemical name for water?
 - a. oxygen dihydride
 - b. dihydrogen monoxide
 - c. monooxygen dihydride
 - d. all of the above
2. Which of the following is the correct chemical formula for ammonium arsenate?
 - a. $(\text{NH}_4)_3\text{AsO}_4$
 - b. $(\text{NH}_3)_4\text{AsO}_3$
 - c. $\text{NH}_4(\text{AsO}_4)_3$
 - d. $(\text{AsO}_4)_3(\text{NH}_4)_4$
3. When an electron-rich atom donates a lone pair to form a bond with an electron-poor atom, the bond is called a/an _____ bond.
 - a. ionic
 - b. dative
 - c. covalent
 - d. metallic
4. What is the oxidation number of sulfur in the ionic compound sodium thiosulfate?
 - a. -4
 - b. -2
 - c. +2
 - d. +4
5. Which of the following statements is FALSE?
 - a. The oxidation number of oxygen is always -2.
 - b. The oxidation number of aluminum is always +3.
 - c. The oxidation number of fluorine is always -1.
 - d. Pure copper has an oxidation number of zero.
 - e. All of the above
 - f. None of the above

6. How many grams of carbon are there in 50 g of CO_2 (MM C = 12; MM O = 16)?
- 21.4 g
 - 18.2 g
 - 13.7 g
 - 36.4 g

For numbers 7-10, refer to the following set of compounds:



7. Which of the three compound/s is/are nonpolar?
- A
 - B
 - C
 - All of the above
 - None of the above
8. Which of the three compounds exhibit London dispersion forces?
- A
 - B
 - C
 - All of the above
 - None of the above

9. Between compounds A and C, which has a higher boiling point?
- Compound A because it is a tetrahedral molecule.
 - Compound C because it has stronger intermolecular forces of attraction.
 - Since compounds A and C have approximately the same molar mass, they will boil at the same temperature.
 - More information is needed.
10. Which of the following statements is/are TRUE?
- Compounds A, B, and C have similar electron pair geometry.
 - The electron pair geometry of compounds B and C is trigonal pyramidal.
 - The electron pair geometry and molecular geometry of compound C are both trigonal pyramidal.
 - All of the above
 - None of the above