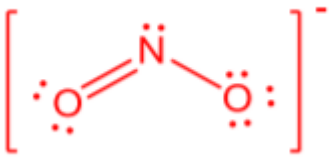
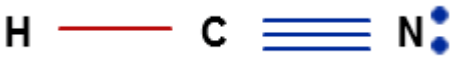
UBSP-Chem quiz 2

NAME:_____

1. Complete the following table. Draw resonance structures where appropriate

Molecule or ion	*LDS*	*Molecular Shape*	*Polar or nonpolar*
NO_2^-	 + resonance	bent	polar
HCN		linear	polar

2. 2. Name or write the correct formula for the following compounds:

Decaselenium pentasulfide $Se_{10}S_5$

silver carbonate

Ag_2CO_3

ammonium phosphate $(NH_4)_3PO_4$

tin (IV) sulfate **$Sn(SO_4)_2$**

$Fe(OH)_2$ iron (II) hydroxide

3. Bonus- Apply the *like dissolves like* rule to predict which of the following substances is soluble/miscible in hexane, C_6H_{14}. Explain your answer

Hexane is nonpolar

A) potassium iodide, KI Polar/ionic

B) Dihydrogen monoxide, polar

C) potassium iodate, KIO_3 polar/ionic

D) Potassium chloride, polar/ionic

E) Carbon dioxide, CO_2, nonpolar

Answer: E