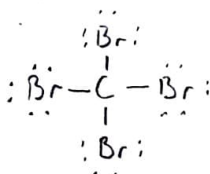


Name Ben Hammond Date 17/11/20

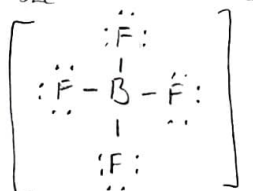
# Lewis Dot, Resonance, Formal Charge, and VSEPR practice

Draw the Lewis dot structures for the following molecules

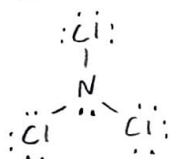
$\text{CBr}_4$   $32e^-$



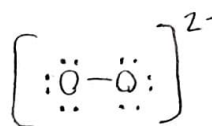
$\text{BF}_4^-$   $32e^-$



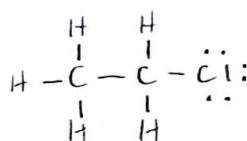
$\text{NCl}_3$   $26e^-$



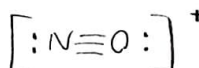
$\text{O}_2^{2-}$   $14e^-$



$\text{C}_2\text{H}_5\text{Cl}$   $20e^-$

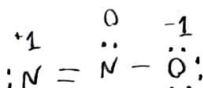
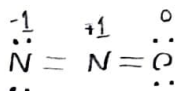


$\text{NO}^+$   $10e^-$

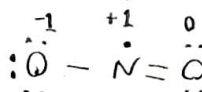


Draw as many resonance structures as you can for the following structures. Assign formal charges.

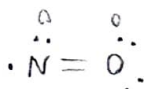
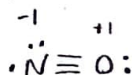
$\text{N}_2\text{O}$  (NNO)  $16e^-$



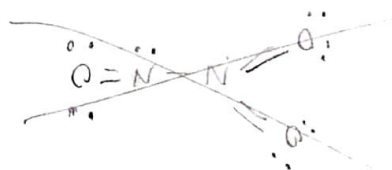
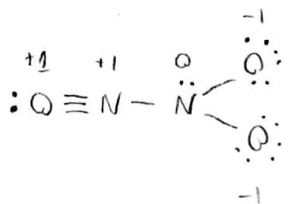
$\text{NO}_2$  (ONO)  $17e^-$



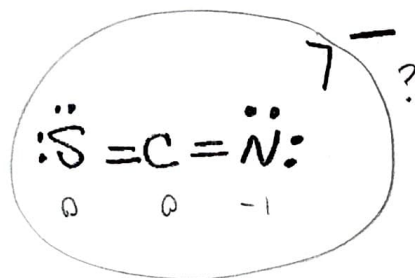
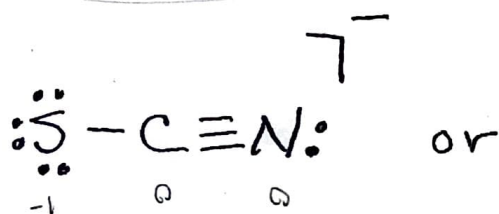
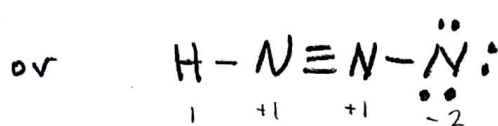
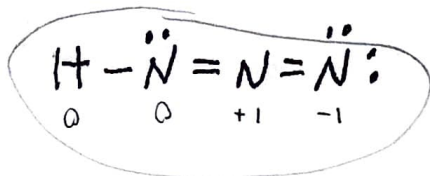
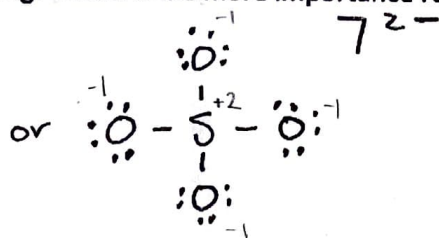
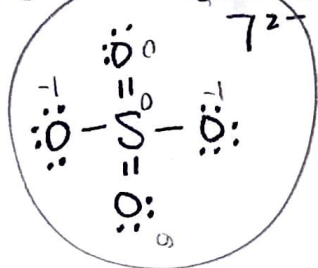
$\text{NO}$   $11e^-$



$\text{N}_2\text{O}_3$  (ONNO2)  $28e^-$



Assign formal charges to the following. Which is the more important resonance structure?

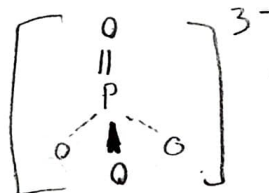


What shape do you expect for the following structures? Build a model of each molecule. Use paddles for lone pairs.

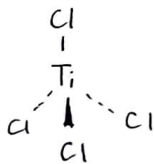
$\text{H}_2\text{Se}$



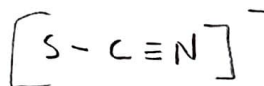
$\text{PO}_4^{3-}$



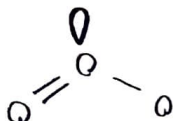
$\text{TiCl}_4$



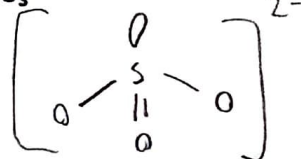
$\text{SCN}^-$



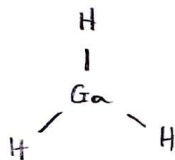
$\text{O}_3$



$\text{SO}_3^{2-}$



$\text{GaH}_3$



$\text{CrO}_4^{2-}$

